

=> d que 123

L1 1 SEA FILE=HCAPLUS ABB=ON PLU=ON US20040223877/PN
 L2 4973 SEA FILE=HCAPLUS ABB=ON PLU=ON TEST?(2A)STRIP#
 L3 QUE ABB=ON PLU=ON (DUAL OR DOUBLE OR TWO OR MANY OR VA
 RIUOS OR MULTI OR MULTIPLE) (3A)PORT#
 L4 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 AND L3
 L5 QUE ABB=ON PLU=ON (DUAL OR DOUBLE OR TWO OR MANY OR VA
 RIUOS OR MULTI OR MULTIPLE)
 L7 665 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 (L) L5
 L8 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND L1
 L12 837 SEA FILE=HCAPLUS ABB=ON PLU=ON LANCET
 L14 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 (5A) L5
 L15 191 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 (5A) L5
 L16 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND (SLOT# OR PORT#)
 L17 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND (SLOT# OR PORT#)
 L19 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR L8 OR L16 OR L17
 L20 4557 SEA FILE=HCAPLUS ABB=ON PLU=ON STRIP#(5A) L5
 L21 74 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND (SLOT# OR PORT#)
 L22 19 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 AND (TEST? OR ANALY?)

 L23 19 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 OR L22

=> d que 138

L1 1 SEA FILE=HCAPLUS ABB=ON PLU=ON US20040223877/PN
 L2 4973 SEA FILE=HCAPLUS ABB=ON PLU=ON TEST?(2A)STRIP#
 L3 QUE ABB=ON PLU=ON (DUAL OR DOUBLE OR TWO OR MANY OR VA
 RIUOS OR MULTI OR MULTIPLE) (3A)PORT#
 L4 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 AND L3
 L5 QUE ABB=ON PLU=ON (DUAL OR DOUBLE OR TWO OR MANY OR VA
 RIUOS OR MULTI OR MULTIPLE)
 L7 665 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 (L) L5
 L8 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND L1
 L12 837 SEA FILE=HCAPLUS ABB=ON PLU=ON LANCET
 L14 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 (5A) L5
 L15 191 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 (5A) L5
 L16 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND (SLOT# OR PORT#)
 L17 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND (SLOT# OR PORT#)
 L19 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR L8 OR L16 OR L17
 L20 4557 SEA FILE=HCAPLUS ABB=ON PLU=ON STRIP#(5A) L5
 L21 74 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND (SLOT# OR PORT#)
 L22 19 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 AND (TEST? OR ANALY?)

 L24 86 SEA FILE=WPIX ABB=ON PLU=ON L19 OR L22
 L25 30 SEA FILE=WPIX ABB=ON PLU=ON L24 AND L2
 L26 30 SEA FILE=WPIX ABB=ON PLU=ON L25 AND (SLOT# OR PORT#)
 L27 6 SEA FILE=WPIX ABB=ON PLU=ON L26 AND L5 (3A) (PORT# OR
 SLOT#)
 L28 1 SEA FILE=WPIX ABB=ON PLU=ON US20040223877/PN
 L29 3 SEA FILE=WPIX ABB=ON PLU=ON L26 AND G01N0027?/IPC
 L30 19 SEA FILE=WPIX ABB=ON PLU=ON L26 AND (METER? OR DEVICE?)
 L31 17 SEA FILE=WPIX ABB=ON PLU=ON L30 AND (TEST? OR MEASUR? OR
 ANALY?) (A) STRIP#
 L32 35917 SEA FILE=WPIX ABB=ON PLU=ON L5 (3A) (PORT# OR SLOT#)
 L33 3 SEA FILE=WPIX ABB=ON PLU=ON L31 AND L32
 L34 9 SEA FILE=WPIX ABB=ON PLU=ON L27 OR L28 OR L29 OR L33
 L36 10534 SEA FILE=WPIX ABB=ON PLU=ON (DUAL OR DOUBLE OR MANY OR
 VARIUOS OR MULTI OR MULTIPLE) (3A) (SLOT# OR PORT#)

10/825,253

L37 3 SEA FILE=WPIX ABB=ON PLU=ON L36 AND (TEST? OR MEASUR? OR
ANALY?) (A)STRIP#
L38 11 SEA FILE=WPIX ABB=ON PLU=ON L34 OR L37

=> d que 141

L36 10534 SEA FILE=WPIX ABB=ON PLU=ON (DUAL OR DOUBLE OR MANY OR
VARIUOS OR MULTI OR MULTIPLE) (3A) (SLOT# OR PORT#)
L39 0 SEA FILE=MEDLINE ABB=ON PLU=ON L36 AND (TEST? OR MEASUR?
OR ANALY?) (A)STRIP#
L40 0 SEA FILE=MEDLINE ABB=ON PLU=ON L36 AND (TEST? OR MEASUR?
OR ANALY?) (3A)STRIP#
L41 0 SEA FILE=MEDLINE ABB=ON PLU=ON L39 OR L40

=> d que 142

L36 10534 SEA FILE=WPIX ABB=ON PLU=ON (DUAL OR DOUBLE OR MANY OR
VARIUOS OR MULTI OR MULTIPLE) (3A) (SLOT# OR PORT#)
L42 0 SEA FILE=PASCAL ABB=ON PLU=ON L36 AND (TEST? OR MEASUR?
OR ANALY?) (A)STRIP#

=> d que 145

L43 3604 SEA FILE=JAPIO ABB=ON PLU=ON (DUAL OR DOUBLE OR MANY OR
VARIUOS OR MULTI OR MULTIPLE) (3A) (SLOT# OR PORT#)
L44 162 SEA FILE=JAPIO ABB=ON PLU=ON L43 AND (TEST? OR MEASUR?
OR ANALY?)
L45 0 SEA FILE=JAPIO ABB=ON PLU=ON L44 AND STRIP#

=> d que 151

L48 2853 SEA FILE=COMPENDEX ABB=ON PLU=ON (DUAL OR DOUBLE OR MANY
OR VARIUOS OR MULTI OR MULTIPLE) (3A) (SLOT# OR PORT#)
L51 2 SEA FILE=COMPENDEX ABB=ON PLU=ON L48 AND (TEST? OR
MEASUR? OR ANALY?) (3A)STRIP#

=> dup rem 123 138 141 142 145 151

L41 HAS NO ANSWERS

L42 HAS NO ANSWERS

L45 HAS NO ANSWERS

FILE 'HCAPLUS' ENTERED AT 10:47:47 ON 07 SEP 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIX' ENTERED AT 10:47:47 ON 07 SEP 2007

COPYRIGHT (C) 2007 THE THOMSON CORPORATION

FILE 'COMPENDEX' ENTERED AT 10:47:47 ON 07 SEP 2007

Compendex Compilation and Indexing (C) 2007

Elsevier Engineering Informat

ion Inc (EEI). All rights reserved.

Compendex (R) is a registered Trademark

of Elsevier Engineering Information Inc.

PROCESSING COMPLETED FOR L23

PROCESSING COMPLETED FOR L38

PROCESSING COMPLETED FOR L41

PROCESSING COMPLETED FOR L42

PROCESSING COMPLETED FOR L45

PROCESSING COMPLETED FOR L51

L52 31 DUP REM L23 L38 L41 L42 L45 L51 (1 DUPLICATE REMOVED)
 ANSWERS '1-19' FROM FILE HCAPLUS
 ANSWERS '20-29' FROM FILE WPIX
 ANSWERS '30-31' FROM FILE COMPENDEX

=> d 1-19 ibib ed abs hitind

L52 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2006:13487 HCAPLUS Full-text

DOCUMENT NUMBER: 144:83660

TITLE: Dual-slot biological test
meter test procedure

INVENTOR(S): Wang, Qiong; Ouyang, Hsing; Ouyang, Ying; Ouyang, Yao

PATENT ASSIGNEE(S): Peop. Rep. China

SOURCE: U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006003462	A1	20060105	US 2005-31619	20050106
TW 262308	B	20060921	TW 2004-93119994	20040702
CN 1779456	A	20060531	CN 2004-10096103	20041126
DE 102005008523	A1	20060216	DE 2005-102005008523	20050224
JP 2006017697	A	20060119	JP 2005-73230	20050315
PRIORITY APPLN. INFO.:			TW 2004-93119994	A 20040702

ED Entered STN: 06 Jan 2006

AB A dual-slot biol. test meter test procedure includes the steps of (1) inserting a code card into the first test slot of a dual-slot biol. test meter to input predetd. parameters and then inserting a test strip into the second test slot to initiate the dual-slot biol. test meter; (2) entering a first state to elec. connect the two electrodes of the inserted test strip if it is over the threshold after application of blood sample to the reaction zone of the inserted test strip, and then entering a second stage to output a voltage to the electrodes of the inserted test strip for a predetd. length of time set by the code card; (3) entering a third stage to read the current value subject to the setting of the code card when the predetd. length of time is up, and then to calculate the test result through a computing method set by the code card subject to the current value obtained, and then to show the test result on a display.

INCL 436149000; 422068100

CC 9-16 (Biochemical Methods)

ST dual slot biol test meter testing;
electrode sensor dual slot testing blood assayIT Memory devices
(EEPROM (elec. erasable programmable read-only), in test
meter; dual-slot biol. test meter test
procedure)IT Samples
(anal. of; dual-slot biol. test meter
test procedure)IT Analysis
Process automation
(automated anal.; dual-slot biol. test

meter test procedure)

IT Quality control
(automatic examination of validity of test strip;
dual-slot biol. test meter test
procedure)

IT Cards
(code, for insertion into first slot, for giving
instructions and computing assay results; dual-slot biol.
test meter test procedure)

IT Analytical apparatus
Blood analysis
Electrodes
(dual-slot biol. test meter test
procedure)

IT Globulins, analysis
(dual-slot biol. test meter test
procedure)

IT Algorithm
(for determining test result; dual-slot biol.
test meter test procedure)

IT Blood analysis
(glucose; dual-slot biol. test meter
test procedure)

IT Control apparatus
Optical imaging devices
Temperature sensors
(in test meter; dual-slot biol. test
meter test procedure)

IT Computers
(microprocessors, in test meter; dual-slot
biol. test meter test procedure)

IT Electric circuits
(of test strip electrodes; control of;
dual-slot biol. test meter test
procedure)

IT Electric potential
(reference, in test meter; dual-slot biol.
test meter test procedure)

IT 50-99-7, D-Glucose, analysis 57-88-5, Cholesterol,
analysis
(dual-slot biol. test meter test
procedure)

L52 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:942110 HCAPLUS Full-text

TITLE: Multi-slot test
strip vial

INVENTOR(S): Boozer, Brad; Flaherty, Joseph; Golnik, Timothy

PATENT ASSIGNEE(S): Agamatrix, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 24pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 2007196240	A1	20070823	US 2006-276309	20060223
PRIORITY APPLN. INFO.:			US 2006-276309	20060223

ED Entered STN: 24 Aug 2007

AB A test strip vial has a container, a test strip magazine disposed within the container, and a lid. The magazine has a plurality of test strip slots radially disposed about an axis of the magazine and extending through the first end of the magazine. The lid is rotatably attached about the open end of the container and has a test strip aperture defined therein that is sequentially aligned with each of the test strip slots as the lid is rotated. The vial also has an incremental rotation mechanism associated therewith that permits incremental rotation of the lid relative to the magazine to sequentially align the aperture with each of the slots. Test strips are individually disposed within the slots.

INCL 422102000

CC 9 (Biochemical Methods)

L52 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:889342 HCAPLUS Full-text

DOCUMENT NUMBER: 145:244411

TITLE: Multiple analyte assay devices

INVENTOR(S): Lee, Jin Po

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 9pp., Cont.-in-part of U.S. Ser. 19,570.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006193746	A1	20060831	US 2006-401193	20060410
WO 2000005579	A1	20000203	WO 1998-US15369	19980722
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AT 346298	T	20061215	AT 1998-938004	19980722
AU 2003262462	A1	20031218	AU 2003-262462	20031119
US 2007128072	A1	20070607	US 2007-650280	20070105
PRIORITY APPLN. INFO.:			WO 1998-US15369	W 19980722
			US 2001-19570	A2 20011108
			AU 1998-86625	A3 19980722
			EP 1998-938004	A 19980722

ED Entered STN: 01 Sep 2006

AB An assay device allowing for the testing for multiple analytes in a liquid sample simultaneously employs a multiplicity of analyte testing strips which protrude from a housing containing slots for each assay test strip and wherein the flow of sample of the test strip is controlled by a cover over the sample contact pad which is inserted into the sample. Six 5 mm + 73 mm strips for detecting drugs of abuse (methamphetamine, opiates/morphine,

marijuana/tetrahydrocannabinol, amphetamine, cocaine/benzoylecgonine, benzodiazepine) were placed in slots of the device of the invention. Each strip consisted of a colloidal gold-labeled antibody (specific to the target drug) incorporated into the upstream end of the strip (tracer zone) in the middle of a 30 mm fiberglass matrix, and an antigen-BSA binder immobilized in the center (binder zone) of a 22 mm nitrocellulose membrane lying downstream of, and in fluid communication with, the fiberglass matrix (wherein the antigen is either the drug of interest or an analog thereof having the same immunogenicity). The nitrocellulose membrane was adhered to a rigid strip of vinyl plastic as support and as a barrier. A strip vinyl film covered the fiberglass matrix and was attached to the underside of the rigid plastic support. Downstream to the nitrocellulose membrane was a 26 mm long filter paper. The matrix, membrane and filter paper were attached to the vinyl sheet so each was in fluid communication, by overlapping 2 mm of each of their ends. The device was immersed in a sample of urine and the results were read after 10 min. The presence or absence of a pink-rose color band in the binder zone indicated neg. or pos. results for the presence of each drug of interest in the analyte sample.

INCL 422058000

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 1, 4

ST assay device multiple analyte; drug of abuse multi
test strip immunoassay app

IT Drugs of abuse

(assays for; multiple analyte assay devices)

IT Filter paper

(downstream to nitrocellulose membrane; multiple analyte
assay devices)

IT Antibodies and Immunoglobulins

(labeled, with gold; multiple analyte assay devices)

IT Samples

(liquid; multiple analyte assay devices)

IT Cannabis sativa

(marijuana; multiple analyte assay devices)

IT Glass fibers, uses

(matrix, at upstream end of test strip and
containing gold-labeled antibody; multiple analyte
assay devices)

IT Membranes, nonbiological

(microporous, test strips, on rigid backing;
multiple analyte assay devices)

IT Immobilization, molecular or cellular

Immunoassay apparatus

Urine analysis

(multiple analyte assay devices)

IT Opioids

(multiple analyte assay devices)

IT Flow

(of sample control by cover over sample contact pad; multiple
analyte assay devices)

IT Absorbents

(pads, in fluid contact with microporous membrane having
test and control zones; multiple analyte assay
devices)

IT Vinyl compounds, uses

(polymers, as support; multiple analyte assay devices)

IT Caps

(removable, inserted over sampling ends of test
strips; multiple analyte assay devices)

IT Lids

(retaining test strips within slots and having transparent window for viewing test and control zones; multiple analyte assay devices)

- IT Albumins, biological studies
(serum, conjugates with antigen or analog, immobilized in nitrocellulose membrane at test zone; multiple analyte assay devices)
- IT Analytical apparatus
(test strip; multiple analyte assay devices)
- IT 9004-70-0, Nitrocellulose
(membrane, with immobilized antigen-BSA binder; multiple analyte assay devices)
- IT 50-36-2, Cocaine 57-27-2, Morphine, analysis 300-62-9, Amphetamine 519-09-5, Benzoylecgonine 537-46-2, Methamphetamine 1972-08-3, Tetrahydrocannabinol 12794-10-4, Benzodiazepine
(multiple analyte assay devices)
- IT 7440-57-5D, Gold, conjugates with antibodies
(multiple analyte assay devices)

L52 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:316546 HCAPLUS Full-text

DOCUMENT NUMBER: 144:365906

TITLE: Electrochemical glucose biosensor plus blood pressure measuring apparatus

INVENTOR(S): Wu, Shu-Mei; Wu, Chia-Chi; Jan, Tung-Chuang; Chen, Chao-Wang

PATENT ASSIGNEE(S): Taiwan

SOURCE: U.S. Pat. Appl. Publ., 9 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006074324	A1	20060406	US 2004-958287	20041006
PRIORITY APPLN. INFO.:			US 2004-958287	20041006

ED Entered STN: 06 Apr 2006

AB The present invention relates to an electrochem. glucose biosensor plus blood pressure measuring apparatus. The electrochem. glucose biosensor plus blood pressure measuring apparatus comprises a slot, an inflatable and deflatable cuff, a pressure sensor and a microprocessor. The slot is able to accept a code card with multiple parameters or a sample strip that comprises a reaction well and a plurality of electrodes thereon in contact with the reaction well. The pressure sensor is used for detecting arterial counterpressure pulses and oscillations at each of the cuff pressure deflating process. The microprocessor is used for controlling the cuff, converting counterpressure pulses and oscillations to voltage signals, processing the voltage signals into a sequence of peak amplitudes and determining a systolic pressure and a diastolic pressure. Furthermore, the microprocessor is used for reading multiple parameters in the code card to measure an analyte in an analyte-containing fluid and calculating a concentration of the analyte. When an analyte-containing fluid (normally blood) is received on the sample strip, the inspection result is obtained according to the operation procedure and parameters obtained previously by the code card. The present apparatus can monitor the blood glucose and blood pressure values at the same apparatus

INCL 600490000; 600549000; 600365000; 435014000

CC 9-1 (Biochemical Methods)
 Section cross-reference(s): 14
 IT Blood analysis
 (glucose; electrochem. glucose biosensor plus blood pressure
 measuring apparatus)
 IT 50-99-7, Glucose, analysis
 (electrochem. glucose biosensor plus blood pressure measuring apparatus)

L52 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:581633 HCAPLUS Full-text
 DOCUMENT NUMBER: 146:496374
 TITLE: Multiple connection three division blood glucose
 test meter; especially comprising
 connector for multiple connection to each medium
 INVENTOR(S): Cui, Gang; Kim, Keun Ki; Lee, Joung Su; Nam, Hak
 Hyun; Cha, Geun Sig
 PATENT ASSIGNEE(S): I-Sens, Inc., S. Korea
 SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
 CODEN: KRXXA7
 DOCUMENT TYPE: Patent
 LANGUAGE: Korean
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2006119039	A	20061124	KR 2005-41565	20050518
PRIORITY APPLN. INFO.:			KR 2005-41565	20050518

ED Entered STN: 30 May 2007

AB A multiple connection three division blood glucose test meter is provided to improve usage convenience by replacing a specific part and a measurement strip according to various purposes and conditions when the specific part is broken. A multiple connection three division blood glucose test meter comprises a liquid crystal display panel displaying measurement values or various figure information, and a power switch for receiving a voltage to a proper place of the liquid crystal display panel, and an operation switch. A measurement strip is inserted into a strip insertion hole. A body part comprises a first connection port on a bottom center, and has a connection piece. A measurement part comprises a control part connected to the bottom of the body part and an investigation part with the strip insertion groove for the measurement strip to be inserted.

CC 9-1 (Biochemical Methods)

ST division blood glucose test meter comprising connector
 medium

IT Measuring apparatus

(Blood glucose test; multiple connection three division
 blood glucose test meter, especially comprising connector for
 multiple connection to each medium)

IT Glucose sensors

(Measurement strip; multiple connection three
 division blood glucose test meter, especially comprising
 connector for multiple connection to each medium)

IT Electric switches

(Operation; multiple connection three division blood glucose
 test meter, especially comprising connector for multiple
 connection to each medium)

IT Electric switches

(Power; multiple connection three division blood glucose
 test meter, especially comprising connector for multiple

- connection to each medium)
- IT Blood analysis
(glucose; multiple connection three division blood glucose test meter, especially comprising connector for multiple connection to each medium)
- IT Control apparatus
Electric potential
Glucose sensors
Liquid crystal displays
(multiple connection three division blood glucose test meter, especially comprising connector for multiple connection to each medium)
- IT Construction materials
(panels, Liquid crystal display; multiple connection three division blood glucose test meter, especially comprising connector for multiple connection to each medium)
- IT 50-99-7, D-Glucose, analysis
(multiple connection three division blood glucose test meter, especially comprising connector for multiple connection to each medium)

L52 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:246336 HCAPLUS Full-text
 TITLE: Investigation of thin films deposition into porous material
 AUTHOR(S): Sedlakova, L.; Kolouch, A.; Hladik, J.; Spatenka, P.
 CORPORATE SOURCE: Department of Material Science, Technical University of Liberec, Liberec, 46017, Czech Rep.
 SOURCE: Problems of Atomic Science and Technology, Series: Plasma Physics (2006), 12, 207-209
 CODEN: PASPFZ
 PUBLISHER: Natsional'nyi Nauchnyi Tsentr "Khar'kovskii Fiziko-Tekhnicheskii Institut"
 DOCUMENT TYPE: Journal
 LANGUAGE: English

ED Entered STN: 07 Mar 2007

AB Although the direct contact of the treated material with the plasma is assumed by the plasma community as a necessary condition of successful plasma treatment, several refs. mention penetration of active species into the porous material. Hydrophylity enhancement has been observed even inside porous material. The aim of this study is exptl. investigation of plasma. This work is aimed to exptl. investigation of thin layers deposition on porous substrates. The porous substrate was simulated with a specimen made from two glass wafers, on the margins of which two difference strips of varying thickness were placed. These strips define the thickness of the slot in the middle. After the deposition the substrate was decomposed and the film deposited inner walls of the glass wafers was investigated. Layers were deposited by method PECVD used RF plasma from gas C2H2. The film thickness was measured in dependence on the distance from the margin into the center of the slab by optical profilometer. Penetration dept was tested in dependence on deposition conditions and geometric configuration of the substrate. Depending on deposition conditions, the film deposition was observed even on the whole substrate.

CC 75 (Crystallography and Liquid Crystals)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:569515 HCAPLUS Full-text
 DOCUMENT NUMBER: 141:85115
 TITLE: Strips for analyzing samples
 INVENTOR(S): Hsu, Tien-Tsai; Lai, Chia-Te; Lin, Hang-Tang
 PATENT ASSIGNEE(S): Taiwan
 SOURCE: U.S. Pat. Appl. Publ., 11 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004134779	A1	20040715	US 2003-341713	20030113
US 7144485	B2	20061205		
CA 2455044	A1	20040713	CA 2004-2455044	20040113
EP 1437589	A1	20040714	EP 2004-548	20040113
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1527049	A	20040908	CN 2004-10028317	20040113
PRIORITY APPLN. INFO.:			US 2003-341713	A 20030113

ED Entered STN: 16 Jul 2004

AB This invention relates to a strip for analyzing a sample. The strip includes two insulating layers, a spacer layer, and a conducting circuit. The spacer layer is disposed between the two insulating layers, and configured to define, together with the two insulating layers, an adsorption port, a sample chamber, a capillary for delivering a sample from the adsorption port to the sample chamber through the capillary, and a vent for facilitating delivery of the sample into the sample chamber. The conducting circuit, also disposed between the two insulating layers, includes a working electrode, a counter electrode, conducting wires, and connectors. A test agent, reactive to an analyte in a sample, is in association with the electrodes.

IC ICM G01N027-26

INCL 204403030; 204412000

CC 9-1 (Biochemical Methods)

ST test strip electrochem biosensor

IT Biosensors

(amperometric; strips for analyzing samples)

IT Electron transfer

Test kits

(strips for analyzing samples)

IT Polymers, uses

(strips for analyzing samples)

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L52 ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:508968 HCAPLUS Full-text

DOCUMENT NUMBER: 141:35937

TITLE: Analyte test instrument having
 improved versatility

INVENTOR(S): Wang, Yi; Karinka, Shridhara Alva; Sanghera,
 Gurdial

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 19 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004118704	A1	20040624	US 2002-326008	20021219
CA 2444094	A1	20040619	CA 2003-2444094	20031001
AU 2003252777	A1	20040708	AU 2003-252777	20031002
WO 2004077052	A1	20040910	WO 2003-US38897	20031208
W: JP				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
JP 2006511818	T	20060406	JP 2004-568861	20031208
PRIORITY APPLN. INFO.:			US 2002-326008	A 20021219
			WO 2003-US38897	W 20031208

ED Entered STN: 24 Jun 2004

AB An **analyte test** instrument that has a **test strip** circuitry that can be configured using information provided by a calibration strip to perform assays with **test strips** having two electrodes and **test strips** having three electrodes. The **analyte test** instrument of this invention comprises: (a) a **test port** for receiving a **test strip**; (b) a microprocessor for executing instructions downloaded into the **analyte test** instrument; (c) a **test strip** circuit capable of having a plurality of configurations, the configurations being set by the microprocessor, whereby an assay can be performed using the **test strip**.

IC ICM G01N027-26

INCL 205792000; 204403010

CC 9-1 (Biochemical Methods)

ST versatile **analyzer**

IT **Analytical apparatus**

Biological materials

Calibration

Electric circuits

Electrodes

(**analyte** determination in biol. sample by **test strip** electrochem. assay with **test instrument** with different modes of operation and improved versatility)

IT Ketone bodies

(**analyte** determination in biol. sample by **test strip** electrochem. assay with **test instrument** with different modes of operation and improved versatility)

IT Computers

(microprocessors; **analyte** determination in biol. sample by **test strip** electrochem. assay with **test instrument** with different modes of operation and improved versatility)

IT 50-21-5, **analysis** 50-99-7, Glucose, **analysis**

(**analyte** determination in biol. sample by **test strip** electrochem. assay with **test instrument** with different modes of operation and improved versatility)

L52 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:286606 HCAPLUS Full-text

TITLE: Capillary sensor **analysis system**
 [Machine Translation].

INVENTOR(S): Marquant, Michael

PATENT ASSIGNEE(S): Roche Diagnostics GmbH, Germany

SOURCE: Ger. Offen.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10244775	A1	20040408	DE 2002-10244775	20020926
CA 2500071	A1	20040415	CA 2003-2500071	20030918
WO 2004030822	A1	20040415	WO 2003-EP10378	20030918
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003283250	A1	20040423	AU 2003-283250	20030918
EP 1542803	A1	20050622	EP 2003-775159	20030918
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006500595	T	20060105	JP 2004-540642	20030918
US 2005230253	A1	20051020	US 2005-88305	20050324
PRIORITY APPLN. INFO.:			DE 2002-10244775	A 20020926
			WO 2003-EP10378	W 20030918

ED Entered STN: 08 Apr 2004

AB [Machine Translation of Descriptors]. Capillary sensor analysis system to the analysis by humans or animals, with capillary sensors, which contain one of at least two wall parts umschlossenen capillary channel, in whom reagents it is contained of a body fluid and a plotting device (2), which contains a capillary sensor mounting plate (23) to bring in order to position a capillary sensor (14) in such a way in a measuring position (22) to the execution of an analysis that its inlet port (13) is accessible, in order one sample/test liquid which can be examined with it in contact whereby the sample/test liquid penetrates due to capillary forces into the capillary channel and fills this. The capillary sensors are formed/trained as multiple capillary sensor strip (3) with in each case a majority of one behind the other provided capillary sensors (14), whereby a multiple capillary sensor strip (3) in the capillary sensor mounting plate (23) of the plotting device (2) is led in such a way and held that a capillary sensor (14) of the strip (3) in the measuring position (22) is in each case and its inlet port (13) for contacting with sample/test liquid (19) is accessible, and which is so movable multiple capillary sensor strip (3) in the plotting device (2) that successively adjacent capillary sensors of the multiple capillary sensor strip (3) are transported into the measuring position (22).

IC ICM G01N001-28

ICS G01N027-327; G01N027-416

L52 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2004:1013221 HCAPLUS Full-text
 DOCUMENT NUMBER: 142:364998

TITLE: Four coplanar superconducting strips:
flux-focusing effects and inductance

AUTHOR(S): Brojeny, Ali A. Babaei; Clem, John R.

CORPORATE SOURCE: Department of Physics, Isfahan University of
Technology, Esfahan, 84154, Iran

SOURCE: Superconductor Science and Technology (2004),
17(11), 1275-1282
CODEN: SUSTEF; ISSN: 0953-2048

PUBLISHER: Institute of Physics Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 25 Nov 2004

AB The authors present analytic solns. for the Meissner-state magnetic-field and
current-d. distributions for four long parallel coplanar superconducting
strips carrying subcrit. currents in a perpendicular magnetic field when there
is no net magnetic flux through the two slots between the outermost strips.
They make use of these solns. to investigate the flux-focusing effect; i.e.,
they calculate how much magnetic flux Φ' per unit length is focused into the
central slot when the strips are in a perpendicular magnetic field $H_a = B_a/\mu_0$
and the outermost pairs of strips carry no net current. They also calculate
the inductance per unit length of the system when the net current flowing in
the two right strips is equal in magnitude but opposite in direction to the
net current flowing in the two left strips. They show that for narrow
superconducting strips, mutual-inductance calcns. based on exact results for
two strips provide good approxns. to their exact results for four strips.

CC 76-4 (Electric Phenomena)

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L52 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:355755 HCAPLUS Full-text

DOCUMENT NUMBER: 138:334014

TITLE: Sample well strip for bioanalysis

INVENTOR(S): Blouin, Matthew R.; Fisette, Robert R.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 18 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003087447	A1	20030508	US 2001-7031	20011108
CA 2465157	A1	20030515	CA 2002-2465157	20021023
WO 2003039230	A2	20030515	WO 2002-US33941	20021023
WO 2003039230	A3	20030710		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002335887	A1	20030519	AU 2002-335887	20021023

AU 2002335887 B2 20070705
EP 1441854 A2 20040804 EP 2002-770656 20021023
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
JP 2005508006 T 20050324 JP 2003-541338 20021023
PRIORITY APPLN. INFO.: US 2001-7031 A 20011108
WO 2002-US33941 W 20021023

ED Entered STN: 09 May 2003

AB A multiple cuvette strip comprises a plurality of wells and a reversible interlocking device. The well strips can be reversibly interlocked to other well strips to form a sample holder system. One embodiment of a well strip comprises a flange and a slot to form a reversible interlocking device.

IC ICM G01N037-00

ICS B01L003-00; G01N035-02; G01N033-86; G01N021-03; B01L009-00

INCL 436069000; 073864910; 436047000; 422102000; 422104000; 436165000

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 1, 14

IT Analytical apparatus

Blood analysis

Blood coagulation disorders

Blood serum

Body fluid

Concentration (condition)

Cuvettes

Diagnosis

Electrolytes, biological

Holders

Pharmaceutical analysis

Samples

Urine analysis

Wells

(sample well strip for bioanal.)

L52 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:368943 HCAPLUS Full-text

DOCUMENT NUMBER: 136:366093

TITLE: Diagnostic sanitary test strip

INVENTOR(S): Carroll, Patrick; Schneider, Jon; Bell, Douglas E.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 13 pp., Cont.-in-part of
U.S. Ser. No. 939,839.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002058330	A1	20020516	US 2001-984948	20011031
US 6991940	B2	20060131		
US 6040195	A	20000321	US 1997-872088	19970610
US 6284550	B1	20010904	US 1999-344895	19990625
US 2005164406	A1	20050728	US 2005-84007	20050321
US 7049130	B2	20060523		
US 2007048878	A1	20070301	US 2006-434063	20060516
PRIORITY APPLN. INFO.:			US 1997-872088	A3 19970610

US 1999-344895	A1 19990625
US 2001-939834	A2 20010828
US 2001-938598	B1 20010827
US 2001-984948	A3 20011031
US 2005-84007	A1 20050321

ED Entered STN: 18 May 2002

AB An improved multi-layered diagnostic sanitary test strip for receiving a heterogeneous fluid, such as whole blood, to test for presence and/or amount of a suspected analyte in the fluid by facilitating a color change in the strip corresponding to the amount of the analyte in the fluid, wherein the test strip includes fluid volume control dams to prevent spillage of the fluid from the strip and a chemical reagent solution that facilitates end-point testing. The improved test strip comprises no more than two operative layers and: (a) a reaction membrane containing a reagent capable of reacting with the analyte of interest to produce a measurable change in said membrane; (b) an upper support layer defining a sample receiving port for receiving the fluid sample thereat; (c) one or more structures for directing the sample containing the analyte of interest through at least a portion of said reaction membrane; and (d) a lower support layer having a reaction viewing port in vertical alignment with said membrane for displaying said measurable change, said lower support being associated with said upper support to secure said reaction membrane in said test strip.

IC ICM G01N033-558

ICS G01N033-543; C12M001-34

INCL 435287200

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 14

ST diagnostic sanitary test strip

IT Measuring apparatus

(Reflectance; diagnostic sanitary test strip)

IT Membranes, nonbiological

(asym.; diagnostic sanitary test strip)

IT Blood analysis

Body fluid

Clinical analyzers

Colorimetry

Dams

Diagnosis

Erythrocyte

Fluids

Interface

Materials

Measuring apparatus

Membranes, nonbiological

Multilayers

Optical absorption

Osteoporosis

Partition

Porosity

Reaction

Samples

Solutions

Volume

(diagnostic sanitary test strip)

IT Ketones, analysis

(diagnostic sanitary test strip)
 IT Enzymes, uses
 (diagnostic sanitary test strip)
 IT Reagents
 (diagnostic sanitary test strip)
 IT Agglutinins and Lectins
 (diagnostic sanitary test strip)
 IT Polysulfones, analysis
 (diagnostic sanitary test strip)
 IT 50-99-7, Glucose, analysis 57-88-5, Cholesterol,
 analysis 58-55-9, Theophylline, analysis
 4429-04-3, Fructosamine 62572-11-6, Hemoglobin A1C
 (diagnostic sanitary test strip)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L52 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:11030 HCAPLUS Full-text

DOCUMENT NUMBER: 136:50642

TITLE: Multiple analyte assay device with
 sample integrity monitoring system

INVENTOR(S): Lee, Jin Po

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 17 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002001854	A1	20020103	US 1999-364277	19990729
US 6514769	B2	20030204		
CA 2303855	A1	20000203	CA 1998-2303855	19980722
WO 2000005579	A1	20000203	WO 1998-US15369	19980722
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9886625	A	20000214	AU 1998-86625	19980722
EP 1018004	A1	20000712	EP 1998-938004	19980722
EP 1018004	B1	20061122		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
AT 346298	T	20061215	AT 1998-938004	19980722
TW 518418	B	20030121	TW 1998-87115443	19980916
EP 1463584	A1	20041006	EP 2000-991676	20000728
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
CA 2379439	A1	20020328	CA 2000-2379439	20000919
AU 200134336	A	20020402	AU 2001-34336	20000919
AU 764945	B2	20030904		
AU 2003262462	A1	20031218	AU 2003-262462	20031119

PRIORITY APPLN. INFO.:

WO 1998-US15369	A	19980722
AU 1998-86625	A3	19980722
EP 1998-938004	A	19980722
US 1999-364277	A	19990729
WO 2000-US20506	W	20000919

ED Entered STN: 04 Jan 2002

AB The invention concerns an assay device, a fluid **analyte** sample separator device and methods for use of thereof for determining whether the integrity of a fluid **analyte** sample has been compromised and for contemporaneously assaying the sample for the presence or absence of multiple **analytes**, such as drugs of abuse. The device is composed of a housing having sep. slots therein for insertion of one or more **analyte test** strips, one end of which protrudes from the housing, and one or more units of a sample integrity monitoring system. The device may be used in dipstick or cassette form. An **analyte** sample separator for division of sample and retention of uncontaminated sample for further testing is also provided. The **analyte test** strips and sample integrity monitoring system are replaceable, so that the panel of **analytes** and of sample condition parameters tested can be customized. Diagrams describing the apparatus are given.

IC ICM G01N033-543

INCL 436518000

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 1

ST app drug of abuse test kit strip immunoassay gold

IT Films

(hydrophobic; multiple **analyte** assay device with sample integrity monitoring system)

IT Cannabis sativa

(marijuana; multiple **analyte** assay device with sample integrity monitoring system)

IT Analytical apparatus

Caps

Drugs of abuse

Human

Immobilization, molecular or cellular

Immunoassay

Membranes, nonbiological

Osmolality

Urine analysis

pH

(multiple **analyte** assay device with sample integrity monitoring system)

IT Opioids

(multiple **analyte** assay device with sample integrity monitoring system)

IT Albumins, analysis

(multiple **analyte** assay device with sample integrity monitoring system)

IT Adsorbents

(pads; multiple **analyte** assay device with sample integrity monitoring system)

IT Test kits

(test strips; multiple **analyte** assay device with sample integrity monitoring system)

IT 7440-57-5, Gold, **analysis**
 (labeled antibody; multiple **analyte** assay device with
 sample integrity monitoring system)

IT 50-36-2, Cocaine 57-27-2, Morphine, **analysis** 67-52-7,
 2,4,6(1H,3H,5H)-Pyrimidinetrione 76-03-9, Trichloroacetic acid,
analysis 76-99-3, Methadone 77-10-1 300-62-9,
 Amphetamine 519-09-5, Benzoyllecgonine 537-46-2, Methamphetamine
 1972-08-3, Tetrahydrocannabinol 12794-10-4, Benzodiazepine
 (multiple **analyte** assay device with sample integrity
 monitoring system)

IT 60-27-5, Creatinine 111-30-8, Glutaraldehyde 14797-65-0, Nitrite,
analysis
 (multiple **analyte** assay device with sample integrity
 monitoring system)

IT 9004-70-0, Nitrocellulose
 (multiple **analyte** assay device with sample integrity
 monitoring system)

L52 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2001:192567 HCAPLUS Full-text
 DOCUMENT NUMBER: 134:204733
 TITLE: Fluid sample distribution system for **test**
 device
 INVENTOR(S): Lu, Frank; Chan, Liang
 PATENT ASSIGNEE(S): Bionike, Inc., USA
 SOURCE: U.S., 11 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
US 6203757	B1	20010320	US 1998-204398	19981202
PRIORITY APPLN. INFO.:			US 1998-204398	19981202

ED Entered STN: 21 Mar 2001

AB Diagnostic products having multiple **test strips** within a unitary diagnostic **test device**, or **test icon**, are described herein. In the preferred embodiments of the diagnostic **test device** of this invention, a fluid sample distribution system is provided wherein a sample collection and distribution **port** is provided in the housing for receipt of a biol. fluid sample and the channeling of such sample onto a sample receiving web. The sample receiving web, which is located within the **test device**, is in fluid communication with an array of **test strips**, and is configured to deliver an aliquot of biol. fluid sample to the **test site** of each such **test strip** at essentially the same rate. In the preferred embodiments of this invention, the sample receiving web comprises at least one base segment and at least one branched segment. Each of the base and branched segments can be formed or cut from a common sheet of material or from sep. sheet material and thereafter placed in contiguous relationship one another. The relative placement of the sample receiving web within the **test device** is coincident with a portion of each **test strip** and designed to effect the balanced distribution and delivery of an aliquot of the biol. fluid sample to the **test site** of each of the **test strips** within the **test device**.

IC ICM G01N033-48

INCL 422058000

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 4

ST fluid system **test device**

IT Development, mammalian postnatal
(child, disease; fluid sample distribution system for test device)

IT Materials handling
(delivery apparatus; fluid sample distribution system for test device)

IT Absorption
Body fluid
Chromophores
Clinical analyzers
Collecting apparatus
Containers
Diagnosis
Distributing apparatus
Drugs of abuse
Fluids
Fluorescent substances
Infection
Isotope indicators
Pharmaceutical analysis
Plates
Samples
Test kits
Volume
(fluid sample distribution system for test device)

IT Enzymes, uses
(fluid sample distribution system for test device)

IT Immunoassay
(immunoabsorption chromatog.; fluid sample distribution system for test device)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:172870 HCAPLUS Full-text
TITLE: Measuring device for the electrical measurement of test strips
INVENTOR(S): Markart, Ernst
PATENT ASSIGNEE(S): Lre Technology Partner Gmbh, Germany
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 6200442	B1	20010313	US 1998-218326	19981222
PRIORITY APPLN. INFO.:			DE 1998-29814996	U 19980820

ED Entered STN: 14 Mar 2001

AB In a measuring device for measuring the concentration of a substance in a liquid applied to the test field of a test strip having two first electrical contacts at its forward end connected to the test field, a conductor plate inside of the device carries a measuring and evaluation circuit and also has formed on it two second electrical contacts which two second electrical contacts, when the forward end of the test strip is inserted into the device through an insertion slot, are brought into contact with the two first

contacts on the test strip to connect the test field of the test strip in circuit with the measuring and evaluation circuit of the conductor plate.

IC ICM G01N027-26

INCL 204400000; 422082010; 324450000; 204403000

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:180863 HCAPLUS Full-text

DOCUMENT NUMBER: 132:205108

TITLE: Diagnostic sanitary test strip

INVENTOR(S): Carroll, Patrick; Schneider, Jon; Bell, Douglas E.

PATENT ASSIGNEE(S): Home Diagnostics, Inc., USA

SOURCE: U.S., 10 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6040195	A	20000321	US 1997-872088	19970610
US 6284550	B1	20010904	US 1999-344895	19990625
US 2002058330	A1	20020516	US 2001-984948	20011031
US 6991940	B2	20060131		
US 2005164406	A1	20050728	US 2005-84007	20050321
US 7049130	B2	20060523		
US 2007048878	A1	20070301	US 2006-434063	20060516
PRIORITY APPLN. INFO.:			US 1997-872088	A3 19970610
			US 1999-344895	A1 19990625
			US 2001-938598	B1 20010827
			US 2001-939834	A2 20010828
			US 2001-984948	A3 20011031
			US 2005-84007	A1 20050321

ED Entered STN: 21 Mar 2000

AB An improved multi-layered diagnostic sanitary test strip for receiving a heterogeneous fluid, such as whole blood, to test for presence and/or amount of a suspected analyte in the fluid by facilitating a color change in the strip corresponding to the amount of the analyte in the fluid, wherein the test strip includes fluid volume control dams to prevent spillage of the fluid from the strip and a chemical reagent solution that facilitates end-point testing. The improved test strip comprises (a) an upper support strip having a fluid receiving port and (b) a lower support strip having a color change viewing port and securely sandwiched therebetween (c) a spreading mesh screen for uniformly distributing the fluid, (d) a chemical treated separating layer for removing an undesirable element, e.g. red blood cells, from the fluid received from the mesh screen, (e) an isotropic membrane chemical treated with a reagent indicator solution for removing any remaining portions of the undesirable element, producing a color change proportionate to the amount of the suspected analyte in the fluid and facilitating an end-point ramp test, and (f) volume control dam partitions for retaining fluid on and in the strip.

The test strip may be used to assay for substances such as cholesterol, ketones, theophyllin and osteoporosis products.

IC ICM G01N033-558
 INCL 436514000
 CC 9-1 (Biochemical Methods)
 Section cross-reference(s): 6, 13, 14
 ST test strip sanitary diagnosis blood
 IT Blood
 Blood analysis
 Body fluid
 Colorimetric indicators
 Diagnosis
 Erythrocyte
 Filters
 Indicators
 Membranes, nonbiological
 Osteoporosis
 Reflection spectroscopy
 Reflectometers
 (diagnostic sanitary test strip)
 IT Ketone bodies
 Ketones, analysis
 (diagnostic sanitary test strip)
 IT Enzymes, analysis
 (diagnostic sanitary test strip)
 IT Agglutinins and Lectins
 (diagnostic sanitary test strip)
 IT Polysulfones, analysis
 (diagnostic sanitary test strip)
 IT Blood analysis
 (glucose; diagnostic sanitary test strip)
 IT Analytical apparatus
 (sanitary test strip; diagnostic sanitary test strip)
 IT Test kits
 (test strip; diagnostic sanitary test strip)
 IT 50-99-7, D-Glucose, analysis 57-88-5, Cholesterol, analysis 58-55-9, Theophyllin, analysis
 (diagnostic sanitary test strip)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:139477 HCAPLUS Full-text

DOCUMENT NUMBER: 124:208985

TITLE: Fatigue test results on adhesive bonded joints

AUTHOR(S): Van Straalen, IJ. J.; Soetens, F.; Dijkstra, O. D.

CORPORATE SOURCE: TNO Building and Construction Research, Delft, 2600 AA, Neth.

SOURCE: Proceedings - International Conference on Aluminum Weldments, 6th, Cleveland, Apr. 3-5, 1995 (1995), 525-35. American Welding Society: Miami, Fla.
 CODEN: 62JAAX

DOCUMENT TYPE: Conference

LANGUAGE: English

ED Entered STN: 09 Mar 1996

AB The paper is dealing with the fatigue test results on adhesive bonded joints of the EUREKA project EU 269 "Design of Aluminum Structures under Fatigue

Loading". Five Partners, i.e. Pechiney Voreppe, INEGI Porto, Alcan International, TWI, and TNO, made a contribution to an exptl. program drawn up by the Dutch Group. A state-of-the-art study indicated that most studies dealt with aerospace applications, which differs significantly from civil engineering practice. Therefore an exptl. program for joints to be used for civil engineering applications was carried out. The main goal was to study the influence of the parameters: joint configuration, pretreatment, and environment. In total 16 combinations of testing parameters were considered. More than 120 fatigue tests were done on 24 mm wide double overlap strips made from 6 mm plate material. Addnl. 18 tests were done on beams for two combinations of testing parameters. The fatigue test results are presented and the results of a statistical anal. are given. A proposal for a classification is made. Finally the factors of influence are quantified and the beam test results are compared with the results of the statistical anal.

CC 56-9 (Nonferrous Metals and Alloys)

L52 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1962:452699 HCAPLUS Full-text
 DOCUMENT NUMBER: 57:52699
 ORIGINAL REFERENCE NO.: 57:10511g-i
 TITLE: Simultaneous dual column gas chromatography
 AUTHOR(S): Merritt, Charles, Jr.; Walsh, J. T.
 CORPORATE SOURCE: Quartermaster Res. & Eng. Center, U.S. Army,
 Natick, MA
 SOURCE: Anal. Chem. (1962), 34, 908-11
 CODEN: ANCHAM; ISSN: 0003-2700
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable

ED Entered STN: 22 Apr 2001

AB of. preceding abstract A gas-chromatograph is described which employs 2 columns having different liquid phases and sop. detectors, and displays simultaneously, chromatograms obtained from each column on sep. channels of a dual channel recorder. The apparatus employs a single injection port, a sample splitter (3-way brass tee), and sep. columns and detector ovens. The injected sample is completely vaporized before being split. Detectors are Gow-Mac Model 9193 (TE-11) and the dual channel strip recorder, Varian, Model G-2g. Column temps. can be sep. controlled isothermally or programmed from 25 to 175° at rates of 2-10°/min. The efficiency of the sample splitting system on 2 different columns by using a representative sample, each of aliphatic and aromatic hydrocarbon, alc., and ester, shows a mean splitting ratio of 50.20/49.80% and a mean ratio of peak areas of 1.008. Replicate detns. on 5 component, heterologous, or homologous systems, by using a different substrate in each column, showed an average deviation of 0.04 to 0.16 for retention volume and a mean error of 1-1.5% for analysis by peak area. The developed apparatus is readily adaptable to qual. analysis by means of retention volume consts.

CC 2 (Analytical Chemistry)

L52 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1962:429086 HCAPLUS Full-text
 DOCUMENT NUMBER: 57:29086
 ORIGINAL REFERENCE NO.: 57:5741i,5742a-c
 TITLE: New instruments for x-ray analysis
 AUTHOR(S): Furnas, Thomas C., Jr.; White, Eugene W.
 CORPORATE SOURCE: Picker X-Ray Corp., Cleveland, OH
 SOURCE: Advan. X-Ray Anal. (1961), 4, 521-37
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 ED Entered STN: 22 Apr 2001

AB New instrumentation for x-ray or neutron diffraction, or for x-ray spectrographic analysis, should be rugged; versatile; convenient to use; capable of remote operation and control; designed with system performance foremost; and whenever practicable, incorporate new answers to the so-called little problems, such as radiation leakage around the x-ray tube port. A description is given of the first of instruments designed to incorporate these features. The discussion is divided into 3 main instrument groups: the diffractometer; the radiation analyzer; and the x-ray generator. The biplane diffractometer, which receives part of its name from the fact that it can be used with its axis either horizontal, vertical, or supported at any acute angle to the vertical, is described in detail including the 4 modes of operation of the diffractometer drive: the sample rotated in the same direction as the detector but at 1/2 the angular velocity, the x-ray source stationary; only the sample rotated, both the x-ray source and detector stationary; only the detector moving, both sample and x-ray source stationary; and both detector and sample rotating at same angular velocity. An integrated radiation analyzer is illustrated, including a detailed description of: pulse-height analyzer; electronic timer; decade scaler; rate meter; diffractometer control; pull-out shelf; high voltage supply; and digital printer. A constant-potential generator is also illustrated and its component parts, recorder range manipulator, dual-function strip chart recorder, and generator panel control are discussed briefly.

CC 25 (Apparatus, Plant Equipment, and Unit Operations and Processes)

IT Analysis
(x-ray, apparatus for)

=> d 20-29 full

L52 ANSWER 20 OF 31 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
AN 2006-124264 [13] WPIX Full-text
CR 2005-758274
DNC C2006-043481 [13]
DNN N2006-107430 [13]
TI Multilayer film useful in packaging article e.g. bags comprises first layer of branched polyethylene having specified density and second layer of different thermoplastic polymer
DC A17; A92; P73
IN HOLMES D A; KERBOW D L; LORENZO-MOORE T V; OPUSZKO S
PA (HOLM-I) HOLMES D A; (KERB-I) KERBOW D L; (LORE-I) LORENZO-MOORE T V; (OPUS-I) OPUSZKO S
CYC 1
PI US 20060019112 A1 20060126 (200613)* EN 17[5]
ADT US 20060019112 A1 Provisional US 2004-553094P 20040315; US 20060019112 A1 Provisional US 2004-571464P 20040514; US 20060019112 A1 US 2005-80759 20050315
PRAI US 2005-80759 20050315
US 2004-553094P 20040315
US 2004-571464P 20040514
IPCI B32B0027-00 [I,A]; B32B0027-00 [I,C]
AB US 20060019112 A1 UPAB: 20060224
NOVELTY - A multilayer film comprises a first layer comprising a branched polyethylene having a density of up to 0.875 g/cm³ and a second layer comprising a different thermoplastic polymer. The first layer is an outer layer that is hermetically heat-sealable and pressure-reclosable.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(A) a packaging article comprising multilayer film having a first layer and a second layer. The first layer is an inside layer of the article. The inside layer is heat sealed to itself or another component of the packaging

article and is hermetically heat-sealable and pressure-reclosable to itself or the other component of the packaging article;

(B) preparation of a sealed article, involving providing a multilayer film having a first layer which is a heat-sealable pressure-reclosable layer and which comprises a branched polyolefin having a density of up to 0.875 g/cm³; and heat sealing the first layer of the multilayer film to itself or another article by heating the first layer to a temperature of at least 50degreesC;

(C) a package comprising a tray having a lidding film adhered to it. The tray has a support member, upwardly extending walls, and a flange above the upwardly extending walls. The lidding film is a multilayer film having the first layer and the second layer. The first layer is an inside heat-sealable, pressure-reclosable layer comprising the branched polyethylene;

(D) an article having a pressure-resealable closure comprising a first resealable surface and a second resealable surface. A first material of the first resealable surface comprises the branched polyethylene. A second material of the second sealing surface comprises a thermoplastic. The branched polyethylene has branches of only 1 - 3 different branch lengths; or at least 3 branches of $-(CH_2CH_2)mH$;

(E) closing a closure, involving applying pressure so as to squeeze together the first resealable surface and the second resealable surface.

m=at least 1.

USE - In an article having a pressure-resealable closure and in packaging article e.g. bags (claimed), pouches, vacuum skin packaging, form-fill- and seal packages to package a large variety of goods.

ADVANTAGE - The film is capable of exhibiting a 40 psi for 1 second at 30degreesC pressure-induced reclose seal strength of at least 50 g/cm for at least 2 repetitions. The film has a total free shrink of 15 - 150 or up to 10% at 185degreesF. The film is hermetically heat-sealable, pressure-reclosable multilayer film. The articles prepared by using the polyethylene can be pressure-sealed and unsealed repeatedly. The film is capable of adhering to itself repeatedly through many cycles of pressure-induced sealing followed by being pulled apart, with the adhesive character maintaining an adhesive bond sufficient to afford a pressure-reclosable feature to the packaging. The pressure-reclosability is capable of providing 2 - 250 (preferably 4 - 100, especially 4 - 25) pressure-reclose cycles.

TECH POLYMERS - Preferred Article: The packaging article is a bag and the inside layer is hermetically heat sealed to itself. The multilayer film is heat-sealed to a second component which is molded or thermoformed. The tray comprises a rigid member to which a flexible film is adhered. The flexible film and the lidding film comprise an O₂-barrier layer. Preferred Film: The first layer is directly adhered to the second layer. The outer seal layer and the second layer are coextruded. The film is produced using a lamination process. The multilayer film further comprises an O₂-barrier layer. The second layer comprises at least one member (a). The first layer comprises a blend containing (wt.%) at least one member (15 - 99) selected from homogeneous hyperbranched polyolefin or a branched polyethylene; and at least one polymer (1 - 85) selected from an olefin homopolymer or copolymer having a density of at least 0.88 g/cc. The first layer is an outer film layer. The second layer is an outer, heat-resistant layer comprising the thermoplastic polyolefin having at least one of DSC melting point or glass transition of at least 100degreesC. At least one of the outer layer of the first layer and second layer has a coefficient of friction of less than 0.5 as measured by ASTM D 1894. The film has a thickness of up to 50 mils Preferred Components: The branched polyethylene is an ethylene/alpha-olefin elastomer. The ethylene/alpha-olefin elastomer comprises homogeneous ethylene/alpha-olefin copolymer that comprises metallocene-catalyzed ethylene/alpha-olefin copolymer. The metallocene-catalyzed homogeneous

ethylene/alpha-olefin comprises linear or long-chain branched homogeneous ethylene/alpha-olefin copolymer. The ethylene/alpha-olefin elastomer comprises a copolymer of ethylene and a 3-20C olefin. The branched polyethylene is an ethylene/alpha-olefin elastomer and has a density of 0.85 - 0.87 g/cm³; and a melt index of 0.5 - 20 g/10 minutes. (a) Is olefin homopolymer, olefin copolymer, polyamide, polyester, ethylene/vinyl alcohol copolymer, halogenated polymer, polystyrene, styrene/butadiene copolymer, polynorbornene, ethylene/unsaturated ester copolymer, or ethylene/unsaturated acid polymer. The branched polyethylene is an ethylene/alpha-olefin elastomer; is present in the outer heat seal layer in an amount of at least 20 wt.% and is makes up 100 wt.% of the first layer. The at least one member selected from the first layer and the second layer comprises at least one member selected from slip agent and antiblock agent.

ABEX EXAMPLE - A two-layer film was coextruded on a Randcastle Extrusion System laboratory scale extruder, model RC 0625, having a 6-inch slot die and utilizing two extruders. Upon emerging from the slot die, the extrudate was deposited onto a first roller, with the extrudate making a partial wrap around the first roller and then passing through a set of nip rollers and then was wound up to form a roll. The first roller was not chilled, but rather was allowed to equilibrate to a temperature between the ambient environment and the temperature of the extrudate. The first film layer of the film was ENGAGE 8100 (RTM; homogeneous ethylene/octene copolymer having a density of 0.870 g/cm³ and a melt flow index of 1 decigram/minute) (100 wt.%). The second film layer was Fortiflex T60-500-119 (RTM; high density polyethylene having a density of 0.961 g/cm³ and a melt index of 6 decigrams/minute) (100 wt.%). Each of the two layers had a thickness of 2 mils, with the two layer film having a total thickness of 4 mils. After the two-layer, 4-mil multilayer film was extruded and wound up, it was allowed to age at least 30 minutes before 36 film strips were cut from the film for seal strength testing. Twelve one-inch wide, ten-inch long strips of the multilayer film were cut from the extruded multilayer film made on the extruder. The length of each of the strips corresponded with the machine direction of the extruded multilayer film, with the width of the film strip corresponding to the transverse direction of the multilayer film. The film strips were taken from the central region of the multilayer film, which had a total width of 5.5 inches. The heat seal layers (the first layer) of the strips of film were heat-sealed transversely to one another to form sealed pairs of strips. The pressure-induced seals and the heat seals were made to seal two strips together across their width. Both the upper seal bar and the lower seal bar were heated to 30, 50, 70, 90, 110 or 130degreesC to make the heat seal. The seal made at 30degreesC was not considered to be a heat seal, but rather was a pressure-induced seal. The resulting heat seal had a length of one inch. The overlapping strips of film were contacted by the upper and lower seal bars for a dwell time of 1 second, with the overlapping film strips was subjected to a pressure of 40 psi between the seal bars. The resulting heat-seal had a total area of 0.375 square inch. After the film strips were heat-sealed to one another, the resulting pairs of film strips, which were sealed together, were allowed to age for at least 30 minutes before the seal strength was measured. Seal strength was measured using ASTM F88 with the seal strength results being reported as maximum load in the units of pounds force per inch. For the heat-seal testing of the film, different film strips pairs taken from the same multilayer film were heat-sealed together at 30, 50, 70, 90, 110 and 130degreesC with sealing beginning at

30degreesC and progressing on up through 130degreesC. After each seal was made, the resulting sealed-together pair of film strips was aged for at least 30 minutes before seal strength testing was conducted. During seal strength testing, the sealed-together pair of film strips was pulled apart. Several pairs of film strips were sealed together and tested for seal strength at each temperature. All of the film strips had low seal initiation temperature and formed strong hermetic seals within the seal temperature of 70 - 110degreesC. The heat-seal could be pulled apart and the film could be pressure reclosed at any location on the sealant layers of each of the pairs of strips. This process of making the pressure-induced reclose seal, as well as the method of testing the strength of the pressure-induced reclose seal, was repeated ten times for each pair of film strips tested.

FS CPI; GMPI

MC CPI: A04-G02E2; A04-G06; A12-P01

L52 ANSWER 21 OF 31 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN

AN 2004-267218 [25] WPIX Full-text

CR 2004-058304; 2004-267217; 2004-267233; 2004-267234; 2004-280116

DNC C2004-104228 [25]

DNN N2004-211207 [25]

TI Collection device, for collecting constituents of air, e.g. for detection of explosives, comprises slotted plate, test strip having support layer and porous layer, and two tubular portions

DC J04; K04; S03

IN ALLEN W C; IGE L

PA (ALLE-I) ALLEN W C; (IGEL-I) IGE L

CYC 1

PI US 20040035187 A1 20040226 (200425)* EN 27[24]

ADT US 20040035187 A1 CIP of US 2002-224688 20020821; US 20040035187 A1 CIP of US 2002-224719 20020821; US 20040035187 A1 US 2003-406843 20030404

FDT US 20040035187 A1 CIP of US 6651520 B

PRAI US 2003-406843 20030404

US 2002-224688 20020821

US 2002-224719 20020821

IPCR A45C0013-10 [N,A]; A45C0013-10 [N,C]; G01N0001-00 [N,A]; G01N0001-00

[N,C]; G01N0001-02 [N,A]; G01N0001-02 [N,C]; G01N0001-22 [I,A];

G01N0001-22 [I,C]; G01N0001-24 [N,A]; G01N0001-24 [N,C];

G01N0027-64 [N,A]; G01N0027-64 [N,C]; G01N0033-00

[I,A]; G01N0033-00 [I,C]; G01N0033-22 [I,A]; G01N0033-22 [I,C]

AB US 20040035187 A1 UPAB: 20050528

NOVELTY - A collection device has slotted plate, test strip having support layer with an aperture and porous layer affixed to the support layer, first tubular portion, and second tubular portion.

DETAILED DESCRIPTION - The collection device comprises a slotted plate with first and second sides, a slot between these sides, and passageway through this slotted slot; test strip having support layer with aperture and porous layer affixed to the support layer and overlaps a portion of the aperture; first tubular portion extending from the first side of the slotted slot and aligned with a portion of the passageway; and second tubular portion extending from the second side of the slotted slot and aligned with a portion of the passageway. A portion of the test strip is within the slotted plate, and the portion of the porous layer that overlaps the aperture is aligned with the passageway.

INDEPENDENT CLAIMS are also included for:

(1) A system for collecting constituents of air comprising the above collection device, and an interface between the collection device and a piece of baggage comprising an interface tube, top securing member, and bottom securing member;

(2) A method of collecting constituents of air from within interior of piece of baggage by inserting an interface within the piece of baggage, inserting the collection device into a recess of the interface, and extracting air from the interior of the piece of baggage through a vent in the interface; and

(3) A method of testing the air within the interior of the piece of baggage by inserting interface within the piece of baggage, inserting the collection device into the recess of the interface, extracting air from the interior of the baggage through the vent, removing the test strip from the slot within the collection device, and analyzing the constituents by placing the test strip into a testing unit and operating the testing unit.

USE - For collecting constituents of air (claimed), e.g. for detection of explosives.

ADVANTAGE - The novel system is able to determine whether explosives are contained within piece of baggage via a non-invasive procedure.

DESCRIPTION OF DRAWINGS - The figure shows a flow diagram of the steps used in the above method for testing air within interior of the piece of baggage.

TECH INSTRUMENTATION AND TESTING - Preferred Components: The collection device further comprises a concave indentation at an open end of the slotted plate. The interface has two clamps having top lip connected to the top securing member and a bottom lip connected to the bottom securing member. It has first and second locking rings. The clamps further include a lever connected to the top lip. The interface further comprises an abutment extending inwardly from an interior of the interface tube.

FS CPI; EPI

MC CPI: J04-C01; K04-F03

EPI: S03-C06; S03-E13C; S03-E14E3

L52 ANSWER 22 OF 31 WPIX COPYRIGHT 2007

THE THOMSON CORP on STN

AN 2004-787330 [78] WPIX Full-text

DNC C2004-275369 [78]

DNN N2004-620665 [78]

TI Dual blood glucose meter comprises upper receiving hole formed on upper end of meter body and lower receiving hole on lower end of meter body for upper measurement strip and lower measurement strip, respectively

DC B04; P31; S03; S05; U14; V04

IN CHA G; CHA G S; CUI G; KIM G G; KIM K; KIM K K; KIM M; KIM M H; NAM H; NAM H H

PA (CHAG-I) CHA G; (CUIG-I) CUI G; (ISEN-N) I-SENS INC; (KIMK-I) KIM K K; (KIMM-I) KIM M H; (NAMH-I) NAM H

CYC 37

PI EP 1475034 A1 20041110 (200478)* EN 16[8]

JP 2004329919 A 20041125 (200478) JA 9

US 20040223877 A1 20041111 (200478) EN

<--

CN 1550780 A 20041201 (200516) ZH

KR 2004096039 A 20041116 (200522) KO

JP 3831734 B2 20061011 (200668) JA 9

ADT EP 1475034 A1 EP 2004-9169 20040416; KR 2004096039 A KR 2003-28840

20030507; CN 1550780 A CN 2004-10032911 20040414; US 20040223877

A1 US 2004-825253 20040415; JP 2004329919 A JP 2004-122398

20040419; JP 3831734 B2 JP 2004-122398 20040419

FDT JP 3831734 B2 Previous Publ JP 2004329919 A

PRAI KR 2003-28840 20030507

IC ICM A61B005-145

IPCI G01N0027-28 [I,A]; G01N0027-28 [I,C]; G01N0027-327 [I,A]; G01N0027-327 [I,C]; G01N0027-416 [I,A]; G01N0027-416 [I,C]

IPCR A61B0005-00 [I,A]; A61B0005-00 [I,C]; A61B0005-145 [I,A]; A61B0005-145 [I,C]; A61B0005-1459 [I,A]; A61B0005-1473 [I,A]; G01N0033-487 [I,A]; G01N0033-487 [I,C]

AB EP 1475034 A1 UPAB: 20050707

NOVELTY - A dual blood glucose meter comprises a meter body (3) formed of a display unit (7) on the front to display measured numerical values and various pieces of pictorial information; an upper receiving hole formed on the upper end of the meter body for an upper measurement strip (5a) to be inserted into; and a lower receiving hole formed on the lower end of the meter body for a lower measurement strip (5b) to be inserted into.

USE - For measuring blood glucose.

ADVANTAGE - The invention allows a measurement strip to be selectively inserted into upper and lower ends of the blood glucose meter so that the measurement strip can be inserted into the upper end of the glucose meter in the same manner as in a conventional blood glucose meter, to allow blood to be collected at the tip of a finger, and so that the measurement strip can be inserted into the lower end of the glucose meter, to allow blood to be conveniently collected at a point of an arm where a pain scarcely occurs at the time of collecting blood.

DESCRIPTION OF DRAWINGS - The figure shows a front view of a dual blood glucose meter with a measurement strip inserted into the upper end.

Meter body (3)

Upper measurement strip (5a)

Lower measurement strip (5b)

Display unit (7)

Power switch (9)

Control switch (11)

TECH INSTRUMENTATION AND TESTING - Preferred Components: A circuit board comprises upper and lower connectors, a measurement unit and a micro-controller unit inside of the meter body. The upper connector is connected with the upper receiving hole. The lower connector is connected with the lower receiving hole. The micro-controller unit transmits a measurable signal to the upper or lower connector and an un-measurable signal to the other. An error message is displayed on the display unit when both the upper connector and lower connector are connected with the measurement strip. The display unit is LCD.

FS CPI; GMPI; EPI

MC CPI: B10-A07; B11-C08; B12-K04A

EPI: S03-E14H1; S05-C01; U14-K01; V04-M05; V04-M30M

L52 ANSWER 23 OF 31 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN

AN 2004-119428 [12] WPIX Full-text

CR 2003-576286; 2004-119058; 2007-583253

DNC C2004-048132 [12]

DNN N2004-095408 [12]

TI Device for determining presence or absence of analyte in fluid sample has support bearing a mark, and matrix having an observation area that becomes transparent in moist state allowing user to view mark on support

DC A89; B04; D13; D15; D16; J04; S03

IN BOEHRINGER H; DAQUIPA M; JACONO B; JEROME J

PA (BOEH-I) BOEHRINGER H; (DAQU-I) DAQUIPA M; (JACO-I) JACONO B; (JERO-I) JEROME J; (QUID-N) QUIDEL CORP

CYC 1

PI US 20030211634 A1 20031113 (200412)* EN 18[4]

US 7226793 B2 20070605 (200737) EN

ADT US 20030211634 A1 Cont of US 2001-950366 20010910; US 20030211634 A1
 US 2003-461157 20030612; US 7226793 B2 Cont of US 2001-950366
 20010910; US 7226793 B2 US 2003-461157 20030612
 FDT US 7226793 B2 Cont of US 6855561 B
 PRAI US 2003-461157 20030612
 US 2001-950366 20010910
 IPCR G01N0021-86 [I,A]; G01N0021-86 [I,C]; G01N0033-543 [I,A]; G01N0033-543
 [I,C]; G01N0033-558 [I,A]; G01N0033-558 [I,C]
 AB US 20030211634 A1 UPAB: 20050528

NOVELTY - A test device (I) to determine an analyte in fluid sample, has support bearing a mark; a matrix on support, comprising sample receiving zone, label zone to label analyte, and observation area comprising capture zone that restrains labeled analyte and comprises material that is transparent in moist state, where mark on support is detectable within observation area and labeled analyte is detectable within capture zone.

DETAILED DESCRIPTION - A test device (I) (10) for determining the presence or absence of an analyte in a fluid sample, comprises:

- (a) a support bearing a mark (46) on it; and
- (b) a matrix (18), defining an axial flow path and positioned on the support, where the matrix comprises:
 - (i) a sample receiving zone (30), at an upstream end of the flow path, that receives the fluid sample;
 - (ii) a label zone (34) comprising a labeled reagent that binds the analyte, when the fluid sample flows through the label zone to form a labeled analyte;
 - (iii) an observation area (38) comprising a defined capture zone (40) that restrains the labeled analyte and comprises a material that is opaque in a dry state and transparent in a moist state; and
 - (iv) control area, disposed downstream of the label zone, where the sample receiving zone, label zone, observation area, and control area are positioned in fluid-flow contact within the flow path, and where the mark on the support is detectable within the observation area when the observation area is in moist state, and the restrained labeled analyte is detectable within the capture zone, and the control area becomes detectable in the presence or absence of analyte after, or concurrent with, sample flow through the control area.

The device also comprises a housing comprising the support and optionally a cover, where the housing contains an application aperture (48) and one or more observation ports (52) that are disposed above the matrix. The test device optionally comprises an intermediate piece bearing a mark on it, where the intermediate piece is disposed between the matrix and the support. The test device optionally comprises a matrix comprising a sample receiving zone; and an observation area, on the flow path, and downstream from the sample receiving zone, the observation area comprising a capture zone that restrains the analyte, where the observation area comprises a material that is opaque in a dry state and transparent in a moist state; where a label reagent specific for the analyte is added to the device either combined in solution with the sample, or separately from the sample, and where the label reagent binds to the analyte before or after it is restrained in the capture zone to form a labeled analyte, and where the restrained and labeled analyte is detectable within the capture zone.

USE - (I) is useful for determining the presence or absence of an analyte chosen from toxin, organic compound, protein, peptide, microorganism, bacteria, a virus, amino acid, nucleic acid, carbohydrate, hormone, steroid, vitamin, drug, antibody, hapten, and aggregation or its combination. The analyte is preferably chosen from heartworm antigen, human chorionic gonadotropin, influenza antigen, and Streptococcus A. (I) is useful for determining the presence or absence of an analyte (human chorionic gonadotropin) in a fluid sample, which involves contacting the sample receiving zone of (I) with the fluid sample, and inspecting the observation

area for analyte restrained in the capture zone, where the mark is detectable within the observation area when the observation area is in a moist state, and where the mark and the restrained labeled analyte are separately detectable. A sample is applied to the sample application pad of (I) (claimed).

ADVANTAGE - The device allows simple and effective detection of the presence or absence of analyte in a fluid sample. The device allows the mark to be placed in a precisely controlled location within the window and can be printed directly on the plastic housing or on an intermediate member disposed between the housing and the test strip. This allows for the actual test strip to be processed continuously in that there is no need to manufacture a control line or minus symbol that is perpendicular to the processing flow. The device does not require any chemical interaction between a label component and a capture component to produce the appearance of a line or symbol in any shape or color. The device achieves the appearance of a minus sign (-) by placing an indicator mark perpendicular to the test line, directly on the underlying support. The mark typically manifests with any sample flow, while the test line develops only with a positive sample flow.

DESCRIPTION OF DRAWINGS - The figure shows the exploded perspective view of test device for detecting presence or absence of an analyte in a fluid sample.

- test device (10)
- flow matrix (18)
- sample application zone (30)
- label zone (34)
- observation area (38)
- capture zone (40)
- mark (46)
- application aperture (48)
- observation port (52)

TECH BIOTECHNOLOGY - Preferred Device: The capture zone comprises an immobilized capture reagent. The housing comprises a single component and where the support and cover comprise top and bottom portions of the housing. The label zone and observation area comprise separate components in fluid-flow contact. The sample receiving zone, label zone and observation area comprise separate components in fluid-flow contact. The housing is transparent. The mark has a shape such that a first symbol is detectable within the observation area when the observation area is in a moist state, and the capture zone has a shape such that, in the presence of the analyte in the sample, a second symbol is detectable, and detection of the first symbol taken together with detection of the second symbol indicates a positive result, where in the absence of analyte in the sample, the detectable first symbol indicates a negative result. The mark is a minus symbol (-) and represents the absence of the analyte, and in the presence of the analyte, the capture zone taken together with mark forms a plus symbol (+). The longitudinal axis of the mark is in the direction of the sample flow, and the longitudinal axis of the capture zone is perpendicular to the direction of the sample flow. The mark has a shape such that, when the observation area is moist, one or more predefined symbols are detectable. The control area has a control line that is spatially distinct from the observation area, and where one or more observation ports are disposed above the capture zone and the control area. The control area is a negative control area, a positive control area, an end of assay control area, or its combination. The device further comprises a sample application pad disposed upstream of, and in fluid-flow contact with the matrix. The sample application pad, label zone, and observation area comprise separate components in fluid-flow contact. The sample application pad, sample receiving zone, label zone, and observation area comprise separate components in fluid-flow contact. The

observation area comprises nitrocellulose or is laminated on a plastic backing material, where the observation area may be viewed through the one or more observation ports and the plastic backing material. The device further comprises an indexing means in physical interaction with the matrix to orient the capture zone in relation to the mark. The two separate observation ports are preferably disposed above the observation area. The intermediate piece comprises a backing material and the matrix is positioned on the intermediate piece.

ABEX WIDER DISCLOSURE - A kit for determining the presence or absence of an analyte in a fluid sample, is also disclosed.

FS CPI; EPI

MC CPI: A12-L04B; B04-B04C1; B04-C02; B04-D01; B04-E01; B04-F10; B04-F11;
B04-G01; B04-J01; B04-J02; B04-N04; B11-C08; B12-K04; D05-H09;
D05-H10; J04-B01B

EPI: S03-E14H4

L52 ANSWER 24 OF 31 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN

AN 2003-777377 [73] WPIX Full-text

DNN N2003-622923 [73]

TI Calibrated vector network analyzer test system for two port devices, has two variable pitch test heads including sub-miniature-A female connector with ground sleeve and signal pin.

DC S01; T01; V04

IN DOI Y

PA (DOIY-I) DOI Y

CYC 1

PI US 20030115008 A1 20030619 (200373)* EN 16[13]

ADT US 20030115008 A1 US 2001-33587 20011218

PRAI US 2001-33587 20011218

IPCR G01R0001-067 [I,A]; G01R0001-067 [I,C]

AB US 20030115008 A1 UPAB: 20060120

NOVELTY - The system has two variable pitch test heads (10) coupled to a vector network analyzer (VNA) and are line calibrated by a micro-strip. Each test head has a sub-miniature-A (SMA) female connector (15) that includes a ground sleeve (18) and a signal pin (16). A ground arm (14) and a signal arm (12) are electrically coupled to the ground sleeve and the signal pin respectively, and are rotated relative to one another.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for measuring the scattering parameters of a two port device under test (DUT).

USE - Used for measuring the scattering parameters of a two port DUT.

ADVANTAGE - The variable pitch test heads reduces the testing time and cost, and the micro-strip facilitates the calibration of the pitch test heads.

DESCRIPTION OF DRAWINGS - The drawing shows a variable pitch test heads of a calibrated vector network analyzer test system.

variable pitch test head (10)

Signal arm (12)

Ground arm (14)

Sub-miniature-A (SMA) female connector (15)

Signal pin (16)

Ground sleeve. (18)

FS EPI

MC EPI: S01-H03A; T01-G02A2B; V04-K09

L52 ANSWER 25 OF 31 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN

AN 2001-483442 [52] WPIX Full-text

DNC C2001-145029 [52]

TI Electrochemical test strip useful for detecting

the concentration of an **analyte**, particularly glucose, in a physiological sample, particularly blood

DC B04; D16

IN SHAH M; YU Y S

PA (LIFE-N) LIFESCAN INC; (SHAH-I) SHAH M; (YUYS-I) YU Y S

CYC 94

PI WO 2001057238 A2 20010809 (200152)* EN 23[7]

AU 2001034569 A 20010814 (200173) EN

EP 1254365 A2 20021106 (200281) EN

KR 2002077407 A 20021011 (200314) KO

CN 1394278 A 20030129 (200334) ZH

CZ 2002002946 A3 20030416 (200336) CS

JP 2003524162 W 20030812 (200355) JA 31

US 20040058433 A1 20040325 (200422) EN

US 6716577 B1 20040406 (200425) EN

MX 2002005796 A1 20031201 (200470) ES

TW 593680 A 20040621 (200506) ZH

AU 778966 B2 20041223 (200510) EN

AU 2005201227 A1 20050414 (200530) EN

RU 2256171 C2 20050710 (200547) RU

MX 225833 B 20050126 (200566) ES

IN 2002CN00835 P4 20070427 (200737) EN

ADT WO 2001057238 A2 WO 2001-US2510 20010125; US 20040058433 A1 Div Ex US 2000-497269 20000202; US 6716577 B1 US 2000-497269 20000202; AU 2001034569 A AU 2001-34569 20010125; AU 778966 B2 AU 2001-34569 20010125; CN 1394278 A CN 2001-803358 20010125; EP 1254365 A2 EP 2001-906688 20010125; JP 2003524162 W JP 2001-558050 20010125; EP 1254365 A2 WO 2001-US2510 20010125; CZ 2002002946 A3 WO 2001-US2510 20010125; JP 2003524162 W WO 2001-US2510 20010125; MX 2002005796 A1 WO 2001-US2510 20010125; RU 2256171 C2 WO 2001-US2510 20010125; MX 225833 B WO 2001-US2510 20010125; TW 593680 A TW 2001-102107 20010202; CZ 2002002946 A3 CZ 2002-2946 20010125; RU 2256171 C2 RU 2002-113054 20010125; MX 2002005796 A1 MX 2002-5796 20020610; MX 225833 B MX 2002-5796 20020610; KR 2002077407 A KR 2002-709856 20020731; US 20040058433 A1 US 2003-666788 20030917; AU 2005201227 A1 AU 2005-201227 20050322; IN 2002CN00835 P4 WO 2001-US2510 20010125; IN 2002CN00835 P4 IN 2002-CN835 20020605

FDT AU 778966 B2 Previous Publ AU 2001034569 A; AU 2005201227 A1 Div ex AU 778966 B; AU 2001034569 A Based on WO 2001057238 A; EP 1254365 A2 Based on WO 2001057238 A; CZ 2002002946 A3 Based on WO 2001057238 A; JP 2003524162 W Based on WO 2001057238 A; MX 2002005796 A1 Based on WO 2001057238 A; AU 778966 B2 Based on WO 2001057238 A; RU 2256171 C2 Based on WO 2001057238 A; MX 225833 B Based on WO 2001057238 A

PRAI US 2000-497269 20000202
US 2003-666788 20030917

IC ICM C12Q001-00; G01N027-327
ICS C12M001-34; C12Q001-26; G01N027-416

IPCR C12M0001-34 [I,A]; C12M0001-34 [I,C]; C12Q0001-00 [I,A]; C12Q0001-00 [I,C]; C12Q0001-26 [I,A]; C12Q0001-26 [I,C]; G01N0027-327 [I,A]; G01N0027-327 [I,C]; G01N0027-416 [I,A]; G01N0027-416 [I,C]; G01N0033-543 [I,A]; G01N0033-543 [I,C]

AB WO 2001057238 A2 UPAB: 20060117

NOVELTY - An electrochemical **test strip** comprising a reaction zone defined by opposing working and reference electrodes separated by a spacer layer and a redox reagent system in the reaction zone, is new.

DETAILED DESCRIPTION - A electrochemical **test strip** comprising a reaction zone defined by opposing working and reference electrodes separated by a spacer layer and a redox reagent system in the reaction zone. At least one of the electrodes has a surface modified with a homogenous surface modification layer made up of self assembling molecules having a first

sulfhydryl end group and a second sulfonate end group, the sulfhydryl and sulfonate end groups being separated by a lower alkyl linker group. The redox reagent system comprises at least one enzyme and a mediator.

USE - The test strip is useful for detecting the concentration of an analyte, particularly glucose, in a physiological sample, particularly blood. The sample is applied to the test strip, an electrical signal is detected in the reaction zone using the electrodes and the signal is related to the amount of analyte in the sample.

A kit comprises the test strip and at least one of a means for obtaining the sample (preferably a lance) and an analyte standard. The kit further comprises an automated instrument for detecting the electrical signal using the electrodes and relating the detected signal to the amount of analyte in the sample.

TECH INSTRUMENTATION AND TESTING - Preferred Components: The reaction zone has a volume of about 0.1-10 microl. At least one of the electrodes comprises gold (preferred), palladium (preferred), silver, iridium, carbon, doped indium tin oxide or stainless steel. Preferably the reference electrode is a gold electrode and the working electrode is a palladium electrode. The spacer layer is thin. The self-assembling molecules are of formula (F1):

HS-(CH₂)_n-SO₃Y (F1)

n = 1-6;

Y = H or cation.

The self assembling molecule is preferably 2-mercaptoethane sulfonic acid or its salt. The enzyme(s) include an oxidizing enzyme, preferably a glucose oxidizing enzyme.

ABEX EXAMPLE - 2-Mercaptoethane sulfonic acid (MESA) (1.000 g.) was dissolved in Milli Q (RTM) water (999 g). Gold and palladium sheets were prepared by sputtering the surface of a 7 mil thick polyester substrate with gold or palladium so that a surface metallic layer of 100-500 Angstroms was obtained. 12 in x 8.5 inch sheets were cut from the sheets and immersed in the MESA solution for 1 minute. The coated sheets were air dried for 1 hour then test strips of 0.2 x 1.2 inch were cut from the sheets. A gold strip and a palladium strip were used to sandwich a die-cut double sided pressure sensitive adhesive strip of thickness 0.005 in and a circular die-cut area that defines the reaction zone, inlet and outlet ports when sandwiched between the strips. A dry reagent consisting of buffer, mediator, enzyme and bulking agents was ink jetted onto the palladium electrode prior to sandwiching the double-sided adhesive.

FS CPI

MC CPI: B04-B04D; B04-D01; B04-L03; B04-N04; B11-A02; B11-C01; B11-C08D; B11-C08E3; B11-C09; B12-K04A; B12-K04E; D05-A02A; D05-A03; D05-H09; D05-H10; D05-H13; D05-J

L52 ANSWER 26 OF 31 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN

AN 2000-431122 [37] WPIX Full-text

DNC C2000-130958 [37]

DNN N2000-321757 [37]

TI Diagnostic test strips for chemical analysis of sample for use with measuring device having test port and capable of performing various tests

DC B04; J04; S03

IN AMES W; AMES W H; CARAYANNOPOULOS L; CHAMBERS G R; DEWEESE M; DEWEESE M D; LEWIS M E; PARKS J M

PA (ABBO-C) ABBOTT LAB

CYC 89

PI WO 2000033074 A1 20000608 (200037)* EN 34[5]

AU 2000017336 A 20000619 (200044) EN

EP 1135679 A1 20010926 (200157) EN
BR 9915637 A 20011106 (200175) PT
JP 2002531828 W 20020924 (200278) JA 32
MX 2001005362 A1 20020201 (200362) ES
US 6773671 B1 20040810 (200453) EN
AU 775743 B2 20040812 (200474) EN

ADT WO 2000033074 A1 WO 1999-US27311 19991117; US 6773671 B1 Provisional
US 1998-110331P 19981130; BR 9915637 A BR 1999-15637 19991117; EP
1135679 A1 EP 1999-960450 19991117; US 6773671 B1 US 1999-441674
19991117; EP 1135679 A1 WO 1999-US27311 19991117; BR 9915637 A WO
1999-US27311 19991117; JP 2002531828 W WO 1999-US27311 19991117; MX
2001005362 A1 WO 1999-US27311 19991117; AU 2000017336 A AU 2000-17336
19991117; AU 775743 B2 AU 2000-17336 19991117; JP 2002531828 W JP
2000-585659 19991117; MX 2001005362 A1 MX 2001-5362 20010529

FDT AU 775743 B2 Previous Publ AU 2000017336 A; AU 2000017336 A Based on
WO 2000033074 A; EP 1135679 A1 Based on WO 2000033074 A; BR 9915637 A
Based on WO 2000033074 A; JP 2002531828 W Based on WO 2000033074 A; MX
2001005362 A1 Based on WO 2000033074 A; AU 775743 B2 Based on WO
2000033074 A

PRAI US 1998-110331P 19981130
US 1999-441674 19991117

IC ICM B01L003-00; G01N033-52

IPCR C12Q0001-00 [I,A]; C12Q0001-00 [I,C]; G01N0027-06 [I,A];
G01N0027-06 [I,C]; G01N0027-327 [I,A];
G01N0027-327 [I,C]; G01N0027-416 [I,A];
G01N0027-416 [I,C]; G01N0031-22 [I,A]; G01N0031-22 [I,C];
G01N0033-52 [I,A]; G01N0033-52 [I,C]; G01N0033-543 [I,A]; G01N0033-543
[I,C]; G01N0037-00 [N,A]; G01N0037-00 [N,C]

AB WO 2000033074 A1 UPAB: 20060116

NOVELTY - Diagnostic test strips for chemical analysis of sample for use with
measuring device having test port and capable of performing various tests, are
new.

DETAILED DESCRIPTION - Diagnostic test strips for chemical analysis of
sample for use with measuring device having test port and capable of
performing various tests, are new.

The strip has a support which releasably engages with the test port. A
sample is received at a reaction area on the support. An indicator interacts
with the test port to select at least one of the various tests of the
measuring device to be performed on the sample.

USE - The sample is especially a bodily fluid and the chemical analysis
measures L-amino acids, alcohols, aldehydes, ketones, urea, creatinine,
xanthines, sarcosine, glucolate, pyruvate, lactate, fructosamine, methylamine,
carbon monoxide, cholesterol, hemoglobin, glycated hemoglobin, microalbumin,
high density lipoproteins or low density lipoproteins, and in particular
glucose. Alternatively, the device may be used in chemical process control to
ensure that the concentrations of various reactants or products, or other
reaction parameters, e.g. pH or salinity, are within predetermined tolerances
at various stages in the process. Alternatively, it may be used for
environmental testing, e.g. to test water quality, or the presence of
pollutants such as sulfuric acid in rainwater. It may also be used to measure
the amount of chlorine in a swimming pool.

ADVANTAGE - A user may perform many different assays with a single
measuring device but without having to manually switch between different
functions or the device. The strip and test port are of simple construction.

TECH BIOTECHNOLOGY - Preferred Test Strip: The
test port includes at least two
electrically conductive pins which react with one or more electrically
conductive indicator contacts to select the test to be performed. The
indicator contacts close a circuit between the pins. In another
embodiment, the indicator has projections which mechanically engage

pins in the test port to select the test to be performed. The projections may displace one or more of the pins. The indicator includes depressions into which pins in the test port may be displaced. Alternatively, the indicator may have an optically detectable pattern capable of signaling or being detected by an optical detector, to select the test to be performed. The indicator contacts may be of carbon, gold, silver, platinum, nickel, palladium, titanium, copper or lead. and are preferably in the form of a printable ink.

ABEX EXAMPLE - As in the previous examples, the test strip is elongate and has a top major surface and a bottom major surface. An indicator is on the bottom major surface of the test strip. In this example, the test port has two electrically conductive pins, which are bridged by the bottom major surface of the test strip when the test strip is releasably engaged in the test port. The measuring device is capable of measuring the resistance across the pins. The resistance measured can serve to indicate the type of test strip being used. If the support material is nonconductive, the lack of an additional indicator material can serve as a null indicator. - In general, a test port that measures resistance can recognize an arbitrarily large number of different indicators. The test port is limited only by its capacity to distinguish between gradations in resistance.

FS CPI; EPI

MC CPI: B01-D02; B04-B04D; B04-B04G; B04-D01; B04-L01; B04-N05; B05-C08; B10-A07; B10-D01; B10-E04; B10-F02; B11-C08E; B12-K04A; J04-B01
EPI: S03-E14H

L52 ANSWER 27 OF 31 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN

AN 1998-436524 [37] WPIX Full-text

CR 1998-559229; 2001-290846; 2001-300290; 2003-450822

DNC C1998-132622 [37]

DNN N1998-340128 [37]

TI Isothermal nucleic acid amplification reaction vessel - has dual chambers to keep the polymerase cool during denaturation, before polymerisation takes place

DC B04; D16; J04; S03

IN BISHOP J C; CATANZARITI L; CHASTAIN D; GARLAND A L; GENNARI F; GRAZIANO L; KLUTTZ B W; MCKINLEY G A; MOE J G; VERA-GARCIA M

PA (INMR-C) BIOMERIEUX VITEK INC

CYC 1

PI US 5786182 A 19980728 (199837)* EN 34[39]

ADT US 5786182 A US 1997-850207 19970502

PRAI US 1997-850207 19970502

IPCR B01L0003-00 [I,A]; B01L0003-00 [I,C]; B01L0007-00 [I,A]; B01L0007-00 [I,C]

AB US 5786182 A UPAB: 20060114

A dual chamber reaction vessel for nucleic acid amplification reaction comprises:

(a) a first chamber for receiving a fluid sample, loaded with an amplification reagent;

(b) a second chamber physically isolated from the first; (c) an enzyme(s) for the reaction either in the first chamber or in fluid connection with the second; and (d) a fluid channel connecting the first chamber to the second. Also claimed are 2 similar reaction vessels for the same as (I), but of slightly different design, a test strip designed to hold numerous reaction vessels, and a temperature control station for holding the test strip.

USE - The vessels are used in nucleic acid amplification reactions,

especially transcription mediated amplification (TMA), an isothermal reaction procedure (see figure). The nucleic acid fluid sample is placed in chamber (A), dissolving the reagent (16) and denatured at high temperature ($\leq 65^{\circ}\text{C}$). The vessel is then cooled to polymerisation temperature (enzyme optimal, $\sim 42^{\circ}\text{C}$) and the enzyme pellet (18) is washed into (A) via connection (20). By maintaining chamber (B) below enzyme denaturation temperature, enables the entire reaction to be set up, without the need to stop the reaction, then add enzyme, thus possible leading to contamination. The test strip (24) allows many samples to be handled and run at the same time, and control of temperature.

ABDT US5786182

A dual chamber reaction vessel (I) for nucleic acid amplification reaction comprises:

- (a) a first chamber for receiving a fluid sample, loaded with an amplification reagent;
- (b) a second chamber physically isolated from the first;
- (c) at least one enzyme for the reaction either in the first chamber or in fluid connection with the second; and
- (d) a fluid channel connecting the first chamber to the second.

Also claimed are:

- (1) a reaction vessel for the same purpose as (I), comprising:
 - (a) an amplification well; and
 - (b) a channel separated from the well by a heat and moisture barrier, where the carrier is movable within the channel and may be moved through the barrier to deliver the enzyme to the well;
- (2) a two-piece disposable reaction vessel comprising:
 - (a) a first piece comprising a first chamber containing an amplification reagent;
 - (b) a second piece comprising a second chamber an amplification enzyme,
 the pieces constructed so that they can be securely joined into a dual chamber reaction vessel, so that a fluid sample may pass from the first to the second chamber;
- (3) a test strip for nucleic acid amplification comprising a body portion defining a plurality of wells arranged in a row and having a first and second end, the second end having a cuvette for conducting an optical analysis of a sample, and comprising an aperture in the body portion adjacent to the first end for receiving a disposable amplification reaction vessel;
- (4) a nucleic amplification station for a test strip, comprising:

- (a) a tray for at least one test strip comprising a first portion and a second portion positioned adjacent to the first and second chambers of the dual chamber reaction vessel;
- (b) a temperature control subsystem for the tray, maintaining the first and second portions of the tray at different amplification reaction temperatures, in turn maintaining the chambers at different temperatures; and
- (c) a fluid conduit opening mechanism in the dual chamber reaction vessel to establish fluid communication between the chambers; and
- (5) a test strip as (4), but also comprising:
 - (d) a vacuum subsystem including a vacuum probe, the test strip and vacuum probe reciprocable relative to each other, and the probe cooperating with the reaction wells in the test strip for transferring a fluid sample from the first chamber to the second chamber via the fluid conduit.

USE

The vessels are used in nucleic acid amplification reactions, especially transcription mediated amplification (TMA), an isothermal reaction procedure (see figure).

The nucleic acid fluid sample is placed in chamber (A), dissolving the

reagent (16) and denatured at high temperature ($\leq 65^{\circ}\text{C}$). The vessel is then cooled to polymerisation temperature (enzyme optimal, 42°C) and the enzyme pellet (18) is washed into (A) via connection (20).

By maintaining chamber (B) below enzyme denaturation temperature, the entire reaction may be set up, without the need to stop the reaction, then add enzyme, thus possibly leading to contamination.

The test strip (24) allows many samples to be handled and run at the same time, and control of temperature.

EXAMPLE

None given.

PREFERRED VESSELS

The vessel of (I) further comprises a way of selectively opening the fluid channel, e.g. a valve, especially a thimble valve, or breakable seal, where the fluid channel comprises a means for creating fluid pressure to break the seal or comprises a plunger reciprocable within the vessel, in a first position, and a second positions which cuts the seal. (I) also comprises a vacuum port which draws fluid

from the first to the second chamber.

The fluid conduit opening mechanism of the test strip station comprises a pin reciprocable with the vacuum probe relative to the test strip and the probe comprises a tip portion. The temperature control subsystem of the station further comprises heat sinks for maintaining temperature of the first and second portions of the test strip.

The station also comprises a base and a plurality of raised ridges defining slots for receiving many test strips and a discontinuous to be in contact with heat sinks.

FS CPI; EPI

MC CPI: B11-C09; D05-H18B; J04-B01
EPI: S03-E04

L52 ANSWER 28 OF 31 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN

AN 1991-368165 [50] WPIX Full-text

DNC C1991-158707 [21]

DNN N1991-281854 [21]

TI Appts. for cutting cards into strips and assembling - has two rotary knife sets supplying carriers leading to collectors, for medical test strips

DC B04; J04; P62; Q31

IN CARLBERG D L; MAY D L; MEIGS T V

PA (KINE-N) KINEMATIC CORPORATI

CYC 1

PI US 5067309 A 19911126 (199150)* EN

ADT US 5067309 A US 1990-545633 19900629

PRAI US 1990-545633 19900629

IPCR B65B0025-00 [I,A]; B65B0025-00 [I,C]; B65B0061-04 [I,C]; B65B0061-08 [I,A]; B65B0063-00 [I,A]; B65B0063-00 [I,C]

AB US 5067309 A UPAB: 20050820

Appts. for cutting cards into strips and assembling batches of strips for transfer into containers comprises a rotary knife set with two sets of spaced cutting discs (59,61) along respective parallel axes, and a strip carrier (18) parallel to the axes, the carrier having spaced strip receiving slots (62,63) on the two sides. Cut strips are directed into respective slots and there are two strip collectors each with a receiving passage to an internal chamber, with relative movement between carrier and collectors so that strips on the two sides are fed to respective collectors, batches of strips subsequently being transferred to containers from the collectors. The two sets of discs are pref. interdigitated.

USE/ADVANTAGE - For cutting diagnostic medical test strips, e.g. for testing blood or urine or for monitoring diabetes, and placing them into bottles or containers. Permits more efficient preparation of the sheet material and the strips. @(10pp Dwg.No.3/6)@

FS CPI; GMPI

MC CPI: B04-B04B; B04-B04D5; B11-C08; B12-K04A; J04-B

L52 ANSWER 29 OF 31 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN

AN 1987-361318 [51] WPIX Full-text

DNC C1987-155037 [21]

TI Transverse cutting of flexible polymer materials - uses drum with horizontal slot in surface along which double-edged knife travels with movable pattern

DC A31

IN SIMONENKO N A

PA (UPLA-R) UKR PLASTIC RESIN

CYC 1

PI SU 1310228 A 19870515 (198751)* RU 2[2]

ADT SU 1310228 A SU 1985-3950992 19850906

PRAI SU 1985-3950992 19850906

IPCR B29B0011-00 [I,C]; B29B0011-02 [I,A]

AB SU 1310228 A UPAB: 20050426

Material-feeding mechanism, movable knife with its own drive, and pattern. The drive consists of hollow shaft (1) on which the pattern (9) can move axially. Drum (3) is also on the fixed shaft and can rotate. It has a horizontal slot in the cylindrical surface, and the axial drive is connected through a hole in the shaft. The knife is positioned in the slot and interacts with the pattern. In the intervals between the cutting, the material passes freely between the rotating drum and guiding rollers. The knife (5) is in the longitudinal slot (4) at one extreme posn., the cutting part above the drum (3) and the tail-piece (6) in contact with the pattern (9). As the knife starts operating, the lever (10) moves the bush (8) along the drum axis causing the knife to move along the slit, cutting the material on the drum's surface. Having reached the other posn., the knife can be drawn back to cut again.

USE/ADVANTAGE - To cut flexible polymer materials into measured strips, offering possibility of cutting the continuously-moving material into offcuts of different lengths. Bul.18/15.5.87..

FS CPI

MC CPI: A11-A05

=> d 30-31 ibib abs ind

L52 ANSWER 30 OF 31 COMPENDEX COPYRIGHT 2007 EEI on STN

ACCESSION NUMBER: 1995(26):1550 COMPENDEX Full-text

TITLE: Recursive algorithm for analysis of planar multiple lines on composite substrates for M(H)MIC's and high-speed interconnects.

AUTHOR: Xu, Yansheng (Ecole Polytechnique, Montreal, Que, Can); Wu, Ke; Bosisio, Renato G.

SOURCE: IEEE Transactions on Microwave Theory and Techniques v 43 n 4 pt 1 Apr 1995.p 904-907

SOURCE: IEEE Transactions on Microwave Theory and Techniques v 43 n 4 pt 1 Apr 1995.p 904-907

CODEN: IETMAB ISSN: 0018-9480

PUBLICATION YEAR: 1995

DOCUMENT TYPE: Journal

TREATMENT CODE: Application; Theoretical

LANGUAGE: English

AN 1995(26):1550 COMPENDEX Full-text

- AB A simple recursive algorithm is presented based on the method of lines for the analysis of multilayered multiple microstrip lines or slots. Our previously proposed scheme of vertical multi-subregion space discretization left bracket 1 right bracket is used to enhance the numerical accuracy. The recursive formulation is extended to model composite substrates which is aimed at reducing the unwanted coupling among different lines in M(H)MIC's and high-speed interconnects. Numerical results are shown for both quasistatic and hybrid-mode analyses. Results of multiple strips on a composite uniaxial anisotropic substrate are also presented. (Author abstract) 11 Refs.
- AN 1995(26):1550 COMPENDEX Full-text
- CC 714.2 Semiconductor Devices and Integrated Circuits; 921.6 Numerical Methods
- CT *Microstrip lines; Substrates; Mathematical models; Numerical methods; Monolithic microwave integrated circuits; Hybrid integrated circuits; VLSI circuits; Calculations; Recursive functions; Algorithms
- ST Multilayered multiple microstrip lines; High speed interconnects; Uniaxial anisotropic substrates; Recursive algorithm; Composite substrates
- L52 ANSWER 31 OF 31 COMPENDEX COPYRIGHT 2007 EEI on STN
- ACCESSION NUMBER: 1994(45):3866 COMPENDEX Full-text
- TITLE: Efficient recursive technique for calculation of planar multiple strips on composite substrates for M(H)MIC and high-speed interconnects.
- AUTHOR: Xu, Yansheng (Ecole Polytechnique, Montreal, Que, Can); Wu, Ke; Bosisio, Renato G.
- MEETING TITLE: Proceedings of the IEEE MTT-S International Microwave Symposium.
- MEETING LOCATION: San Diego, CA, USA
- MEETING DATE: 23 May 1994-27 May 1994
- SOURCE: IEEE MTT-S International Microwave Symposium Digest v 1 1994. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA.p 329-332
- SOURCE: IEEE MTT-S International Microwave Symposium Digest v 1 1994. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA.p 329-332
- CODEN: IMIDDM ISSN: 0149-645X
- ISBN: 0-7803-1779-3
- PUBLICATION YEAR: 1994
- MEETING NUMBER: 20971
- DOCUMENT TYPE: Conference Article
- TREATMENT CODE: General Review; Theoretical
- LANGUAGE: English
- AN 1994(45):3866 COMPENDEX Full-text
- AB A novel technique is proposed to analyze multiple strips or slots on composite isotropic or uniaxial anisotropic multilayer substrates with segments. This technique is based on the method of lines with vertical space discretization to enhance the numerical efficiency. A recursive algorithm is formulated to efficiently analyze composite substrates with segments for reduction of the coupling among the different strips together with cross-talk and pulse distortion in highspeed interconnects. Numerical results are shown for both quasi-static and hybrid-mode analysis. This technique is validated by comparison of the calculated results with literature. (Author abstract) 5 Refs.
- AN 1994(45):3866 COMPENDEX Full-text
- CC 715.2 Industrial Electronic Equipment; 721.1 Computer Theory (Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory); 921.6 Numerical Methods; 714.2 Semiconductor Devices and Integrated Circuits; 716.1 Information and Communication Theory; 711.1 Electromagnetic Waves in Different Media
- CT *Strip telecommunication lines; Algorithms; Composite materials;

10/825,253

Monolithic integrated circuits; Microwave devices; Electric wiring;
Crosstalk; Signal distortion; Recursive functions; Mathematical models
ST Planar multiple strips; Composite substrates; Monolithic microwave
integrated circuits; High speed interconnects; Pulse distortion;
Hybrid mode analysis

=> d his nofile

(FILE 'HOME' ENTERED AT 09:56:30 ON 07 SEP 2007)

FILE 'HCAPLUS' ENTERED AT 09:57:01 ON 07 SEP 2007

```

L1      1 SEA ABB=ON  PLU=ON  US20040223877/PN
L2      4973 SEA ABB=ON  PLU=ON  TEST? (2A) STRIP#
L3      QUE ABB=ON  PLU=ON  (DUAL OR DOUBLE OR TWO OR MANY OR
      VARIUOS OR MULTI OR MULTIPLE) (3A) PORT#
L4      0 SEA ABB=ON  PLU=ON  L2 AND L3
L5      QUE ABB=ON  PLU=ON  (DUAL OR DOUBLE OR TWO OR MANY OR
      VARIUOS OR MULTI OR MULTIPLE)
L6      795 SEA ABB=ON  PLU=ON  L2 AND L5
L7      665 SEA ABB=ON  PLU=ON  L2 (L) L5
L8      0 SEA ABB=ON  PLU=ON  L7 AND L1
L9      288 SEA ABB=ON  PLU=ON  L7 AND ANT/RL
L10     4 SEA ABB=ON  PLU=ON  L9 AND PORT#
L11     16 SEA ABB=ON  PLU=ON  LANCET DEVICE#
L12     837 SEA ABB=ON  PLU=ON  LANCET
L13     120 SEA ABB=ON  PLU=ON  L12 (L) L5
L14     11 SEA ABB=ON  PLU=ON  L12 (5A) L5
L15     191 SEA ABB=ON  PLU=ON  L2 (5A) L5
L16     9 SEA ABB=ON  PLU=ON  L15 AND (SLOT# OR PORT#)
L17     0 SEA ABB=ON  PLU=ON  L14 AND (SLOT# OR PORT#)
L18     21 SEA ABB=ON  PLU=ON  L4 OR L8 OR L10 OR L14 OR L16 OR L17
L19     9 SEA ABB=ON  PLU=ON  L4 OR L8 OR L16 OR L17
L20     4557 SEA ABB=ON  PLU=ON  STRIP# (5A) L5
L21     74 SEA ABB=ON  PLU=ON  L20 AND (SLOT# OR PORT#)
L22     19 SEA ABB=ON  PLU=ON  L21 AND (TEST? OR ANALY?)
L23     19 SEA ABB=ON  PLU=ON  L19 OR L22

```

FILE 'WPIX' ENTERED AT 10:15:55 ON 07 SEP 2007

```

L24     86 SEA ABB=ON  PLU=ON  L19 OR L22
L25     30 SEA ABB=ON  PLU=ON  L24 AND L2
L26     30 SEA ABB=ON  PLU=ON  L25 AND (SLOT# OR PORT#)
L27     6 SEA ABB=ON  PLU=ON  L26 AND L5 (3A) (PORT# OR SLOT#)
L28     1 SEA ABB=ON  PLU=ON  US20040223877/PN
L29     3 SEA ABB=ON  PLU=ON  L26 AND G01N0027?/IPC
L30     19 SEA ABB=ON  PLU=ON  L26 AND (METER? OR DEVICE?)
L31     17 SEA ABB=ON  PLU=ON  L30 AND (TEST? OR MEASUR? OR ANALY?) (A)
      STRIP#  PLU=ON  L5 (3A) (PORT# OR SLOT#)
L33     3 SEA ABB=ON  PLU=ON  L31 AND L32
L34     9 SEA ABB=ON  PLU=ON  L27 OR L28 OR L29 OR L33
L35     3756511 SEA ABB=ON  PLU=ON  5
L36     10534 SEA ABB=ON  PLU=ON  (DUAL OR DOUBLE OR MANY OR VARIUOS OR
      MULTI OR MULTIPLE) (3A) (SLOT# OR PORT#)
L37     3 SEA ABB=ON  PLU=ON  L36 AND (TEST? OR MEASUR? OR ANALY?) (A)
      STRIP#
L38     11 SEA ABB=ON  PLU=ON  L34 OR L37

```

FILE 'MEDLINE' ENTERED AT 10:26:33 ON 07 SEP 2007

```

L39     0 SEA ABB=ON  PLU=ON  L36 AND (TEST? OR MEASUR? OR ANALY?) (A)
      STRIP#
L40     0 SEA ABB=ON  PLU=ON  L36 AND (TEST? OR MEASUR? OR ANALY?) (3A)
      ) STRIP#
L41     0 SEA ABB=ON  PLU=ON  L39 OR L40

```

FILE 'PASCAL' ENTERED AT 10:27:22 ON 07 SEP 2007

10/825,253

L42 0 SEA ABB=ON PLU=ON L36 AND (TEST? OR MEASUR? OR ANALY?) (A)
 STRIP#

FILE 'JAPIO' ENTERED AT 10:29:36 ON 07 SEP 2007

L43 3604 SEA ABB=ON PLU=ON (DUAL OR DOUBLE OR MANY OR VARIUOS OR
 MULTI OR MULTIPLE) (3A) (SLOT# OR PORT#)

L44 162 SEA ABB=ON PLU=ON L43 AND (TEST? OR MEASUR? OR ANALY?)

L45 0 SEA ABB=ON PLU=ON L44 AND STRIP#

FILE 'COMPENDEX' ENTERED AT 10:33:29 ON 07 SEP 2007

L46 0 SEA ABB=ON PLU=ON L36 AND (TEST? OR MEASUR? OR ANALY?) (A)
 STRIP#

L47 0 SEA ABB=ON PLU=ON L36 AND (TEST? OR MEASUR? OR ANALY?) (A)
 STRIP#

L48 2853 SEA ABB=ON PLU=ON (DUAL OR DOUBLE OR MANY OR VARIUOS OR
 MULTI OR MULTIPLE) (3A) (SLOT# OR PORT#)

L49 53 SEA ABB=ON PLU=ON L48 AND STRIP#

L50 28 SEA ABB=ON PLU=ON L49 AND (TEST? OR MEASUR? OR ANALY?)

L51 2 SEA ABB=ON PLU=ON L48 AND (TEST? OR MEASUR? OR ANALY?) (3A)
)STRIP#

FILE 'HCAPLUS, WPIX, COMPENDEX' ENTERED AT 10:47:47 ON 07 SEP 2007

L52 31 DUP REM L23 L38 L41 L42 L45 L51 (1. DUPLICATE REMOVED)
 ANSWERS '1-19' FROM FILE HCAPLUS
 ANSWERS '20-29' FROM FILE WPIX
 ANSWERS '30-31' FROM FILE COMPENDEX